T-SB-0031-18 May 10, 2018



SMT Warning Light ON, Buzzing Noise, and/or Cannot Shift

Service

Category Drivetrain

Section Manual Transmission/Transaxle Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2001 - 2005	MR2 Spyder	Transmission(s): 5SMT, 6SMT

Introduction

Some 2001 – 2005 model year MR2 Spyder vehicles may exhibit a condition where the Sequential Manual Transmission (SMT) warning light comes on, a buzzing noise is heard from the engine compartment, and/or the shift state cannot be changed. Follow the Repair Procedure in this bulletin to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	-	_	_	-

Parts Information

PART NUMBER	PART NAME	QTY
35697-17010	Transaxle Oil Seal Ring	2
08886-02206	Sequential M/T Fluid	3.5 U.S. qts (3.3 liters)

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Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Reservoir Cap Seal	<u>90080-30087</u>	1

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

Repair Procedure

1. Confirm the condition exists.

Are either of the following conditions present?

- A. The SMT warning light comes ON and a buzzing noise is heard from the engine compartment with Diagnostic Trouble Codes (DTCs) P1880 or P0942 present.
- B. The SMT warning light comes ON and shift state CANNOT be changed with DTCs P0942, P0919, P1880, P1873, P1646, or P1647 present.
- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- Check for SMT fluid leakage.

Is there ANY SMT fluid blotting or leakage from the reservoir cap cover or Hydraulic Power Unit (HPU) assembly seal?

- YES Continue to step 3.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- Drain ALL SMT fluid from the SMT system.

NOTICE

ALL SMT fluid MUST be drained BEFORE replacing the transaxle oil seal rings.

4. Remove the air cleaner assembly.

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Repair Procedure (continued)

5. Clean ANY fluid that has seeped out from the surrounding area of the reservoir tank of the sequential transmission pump assembly with brake cleaner (or equivalent) and apply air.

6. Remove the reservoir tank.

A. Extract the fluid from the reservoir tank (approximately 400 cc).

HINT

If the vent hole of the cap is closed AFTER extraction (with SST 90080-30087), the amount of fluid dripped during the removal of the reservoir cap cover can be reduced.

B. Remove the sequential transmission pump bracket and three fixing bolts for higher working efficiency.

Figure 1.

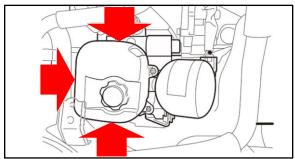
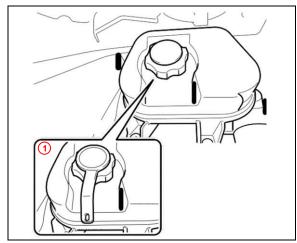
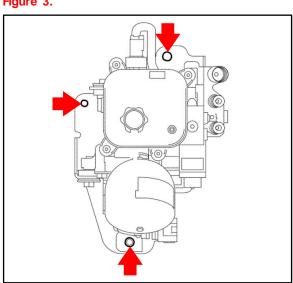


Figure 2.



Reservoir Cap Seal (SST 90080-30087)

Figure 3.





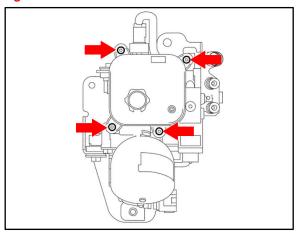
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Repair Procedure (continued)

C. Remove the reservoir tank by removing the four bolts as shown using a T20 TORX® socket wrench.

Figure 4.

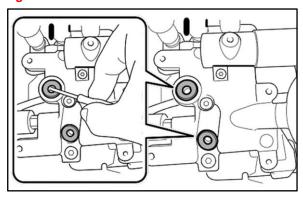


- 7. Replace the transaxle oil seal rings.
 - A. Remove the two transaxle oil seal rings using a thin standard-tip screwdriver.

HINT

If dirt is found inside the port, wipe it off with a paper towel (or equivalent).

Figure 5.

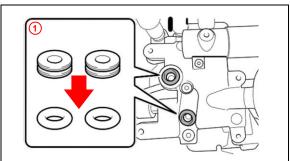


B. Install the NEW transaxle oil seal rings.

HINT

The shape of the transaxle oil seal ring was changed to the O-ring shape and has no assembling direction.

Figure 6.



Transaxle Oil Seal Rings

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Repair Procedure (continued)

8. Install the reservoir tank.

A. Install the reservoir tank with the four bolts.

Torque: 5 N*m (51 kgf*cm, 4 ft*lbf)

B. Install the sequential transmission pump bracket with the three bolts.

Torque: 11 N*m (112 kgf*cm, 8 ft*lbf)

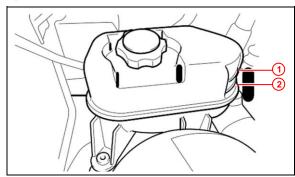
9. Replenish the SMT fluid.

- A. Replenish the SMT fluid until it reaches the Low level.
- B. Release the accumulator pressure and then replenish the SMT fluid until it reaches the UPP level.

NOTICE

- When replacing the transaxle oil seal rings, make sure to replace SMT fluid in the SMT system.
- See the Repair Manual pre-check for the pressure reduction and fluid level check.
- C. Open the driver side door and check the fluid level and for fluid seepage (AFTER stop of HPU).
- 10. Install the air cleaner assembly.
- 11. Confirm the condition no longer exists.

Figure 7.



1	UPP Level
2	Low Level