



Technical Service Bulletin

SUBJECT:		No: TSB-25-27-001	
ABNORMAL NOISE/VIBRATION FROM THE REAR DIFFERENTIAL ASSEMBLY		DATE: April 2025	
		MODEL: Outlander	
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input checked="" type="checkbox"/> WARRANTY PROCESSOR	<input checked="" type="checkbox"/> SALES MANAGER

PURPOSE

An abnormal noise and/or vibration may occur in the Rear Differential Assembly. The hole where the breather pipe is inserted on the rear differential carrier is off-spec and the o-ring on the breather pipe can become damaged when inserting the breather pipe into the rear differential carrier, which could allow water to enter the coupling. If water enters the coupling, transferred torque could fluctuate and abnormal noise and vibration can occur when driving.

Upon customer complaint and confirmation of an abnormal noise/vibration occurring, please follow the work procedure below to replace the Coupling Unit, and Right Rear Differential Breather Pipe.

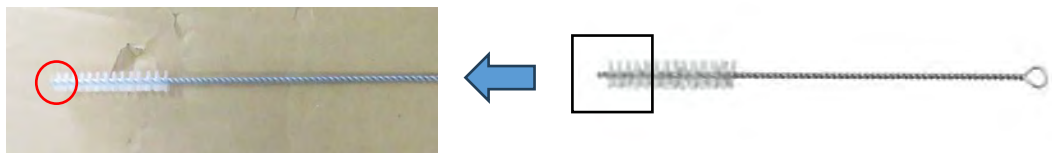
AFFECTED VEHICLES

2022-2024 Outlander (VIN cut off JA4J4VA86RZ077680 / June 18, 2024)

WORK PROCEDURE

Please refer to the following work procedure and the Service Manual for additional parts and directions required to complete the repair.

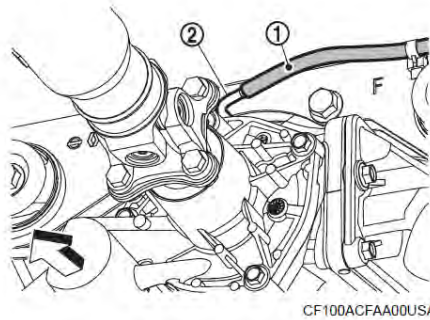
Please note: To avoid damage from occurring on the insertion hole during cleaning, sand the metal tip down on the nylon brush.



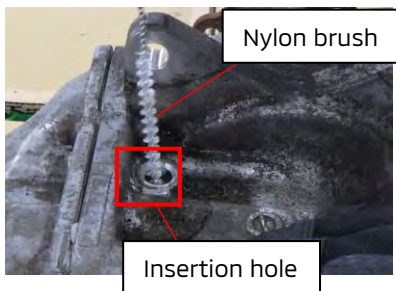
WORK PROCEDURE (continued)

1. Remove the fuel tank, rear driveshaft and remove the rear differential.

Please note: Do not remove the breather hose from the suspension member; leave it on the body side.



2. Clean around the coupling to prevent contaminants from entering coupling before removing the old breather pipe. To avoid damage from occurring on the insertion hole during cleaning, sand the metal tip down on the nylon brush.
3. Remove the old breather pipe from differential carrier.
4. Clean insertion hole with nylon brush and parts cleaner in a way not to damage the insertion hole of differential carrier breather.



※Clean the area above the red line (o-ring position) so that the o-ring is not damaged when installing the breather pipe.

※Be careful not to damage the o-ring position as this may result in water intrusion.

5. Install the new breather pipe:
 - a. Apply coupling oil to the insertion hole of differential carrier breather so that the o-ring can be smoothly inserted.
 - b. Fill the container cap of the bottle with coupling oil, dip the breather pipe with o-ring in the container to apply coupling oil all around the o-ring.



WORK PROCEDURE (continued)

c. Insert the o-ring carefully to avoid damaging o-ring.

Please note: Do not force o-ring in. Tapping breather pipe lightly once makes the breather pipe stand upright.

d. Fix the breather pipe by tightening the bolt (8 Nm).

6. Remove coupling and drain the old coupling oil inside the tank cover from hole (red circle shown below):

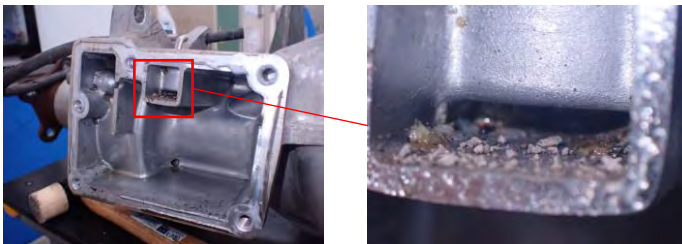


7. Remove coupling oil tank cover.

Please note: Remove the original gasket sealant completely in advance with a spatula.

8. Clean inside of coupling oil tank.

Please note: The space at the back of the breather should also be cleaned.

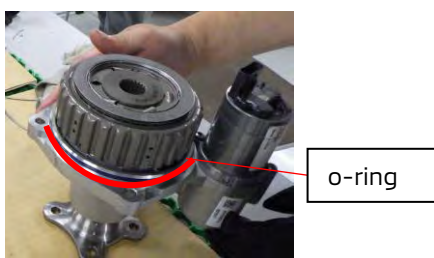


9. Dry the inside of coupling oil tank with compressed air.

Please note: Do not leave moisture and contamination in coupling oil tank.

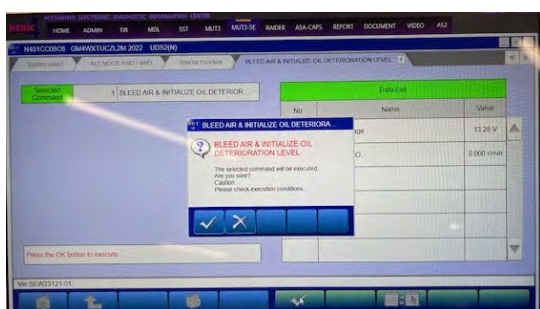
10. Install new coupling.

Please note: Apply coupling oil around the o-ring of coupling and carefully insert coupling to the differential carrier.



WORK PROCEDURE (continued)

11. Apply gasket sealant to coupling oil tank cover and install it.
Please note: Follow the Service Manual for details.
12. Allow 1 hour for gasket sealant to dry/become solid.
13. Fill with new coupling oil.
14. Install Rear Axle Differential , right rear Axle Drive Shaft, and Fuel Tank. At this time, assemble the Breather Hose to the Breather Pipe (new).
15. Fill with new Differential oil.
16. Program AWD control unit.
17. Bleed air.



PARTS INFORMATION

PART NAME	PART NO.	QUANTITY	REMARKS
COUPLING UNIT, RR DIFF	3570A087	1	Primary failed part
PIPE, RR DIFF BREATHER	3501A863	1	
GASKET SEALANT	TB1215	1	Or equivalent
BORGWARNER LSC TRANSMISSION FLUID 12-301: 0.6l	MZ321133	-	Also referred to as Coupling Oil
DIFFERENTIAL GEAR OIL (SAE 75W-80): 0.5l	MZ321131	-	Also referred to as Differential Oil
PARTS CLEANER	-	-	
NYLON BRUSH	-	-	To clean hole of breather pipe

WARRANTY

This bulletin is supplied as technical information only and is not an authorization to repair. If an affected vehicle is reported with the described condition, diagnose the condition, repair as described in this bulletin and submit a normal warranty claim using the information below.

Labor Operation Code	Operation	Cause Code A	Nature Code B	Nature Code C	Quantity	Labor Time	Primary Failed Part Number
276121SX	Replacement	130	31	L	1	6.5H	3570A087