

Creak or Click Type Noise From Rear Over Bumps or When Braking

Service Category Suspension

Section Rear Suspension

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021 - 2023	Mirai	

REVISION NOTICE

November 14, 2023 Rev1:

- The Parts Information section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2021 – 2023 model Mirai vehicles may exhibit a creaking or clicking type noise from the rear suspension member. This condition may occur when braking or when driving over speed bumps and uneven surfaces. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VIN shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Mirai	Motomachi	2WD	JTDAAAAA#PA009091

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFFP	T1	T2
SU2301	R & R the Rear Suspension Member Upper and Lower Stoppers	1.5	52274-***** 52278-*****	91	99

*Warranty claim MUST be submitted with the correct 10-digit OFFP. Choose the correct OFFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
52278-50030	52278-62020	Stopper, Rear Suspension Member, Rear Lower	2
52274-50020	52274-62030	Stopper, Rear Suspension Member, Lower	2
52274-62010	52274-62040	Stopper, Rear Suspension Member, Lower	2

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Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
ChassisEAR™ (or Equivalent)*	JSP06608 (JS Products)	1
Insulated Glove Set, Rubber With Leather Protectors*	01413-00072 (Medium)	2
	01413-00073 (Large)	
	01413-00074 (Extra Large)	

*Essential SST.

CAUTION

ALWAYS inspect the insulated gloves before use for cracks, ruptures, tears, pinholes, or damage. Do **NOT** wear if damaged.

NOTE

- A mechanic's stethoscope or similar tool may be used in place of ChassisEAR™.
- ChassisEAR™ may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Additional SSTs may be ordered by calling 1-800-933-8335.

REQUIRED TOOLS & MATERIAL	QTY
Engine Lifter or Transmission Jack	1
Torque Wrench	1

Repair Procedure

1. Confirm the condition exists.
 - A. Test-drive the vehicle over a speed bump or uneven surface.
 - B. Is there a creaking or clicking type noise from the rear of the vehicle?
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply.
Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (continued)

2. Attach the ChassisEar™ (or equivalent), to the rear suspension member sub assembly front upper, front lower stoppers and rear lower stoppers.

3. Test-drive the vehicle over a speed bump or uneven surface.
Is there a creaking or clicking type noise from the rear suspension member sub assembly upper and/or lower stopper(s)?

HINT

Applying soapy water to the suspected stopper may temporarily diminish the noise intensity and help identify the source of the noise.

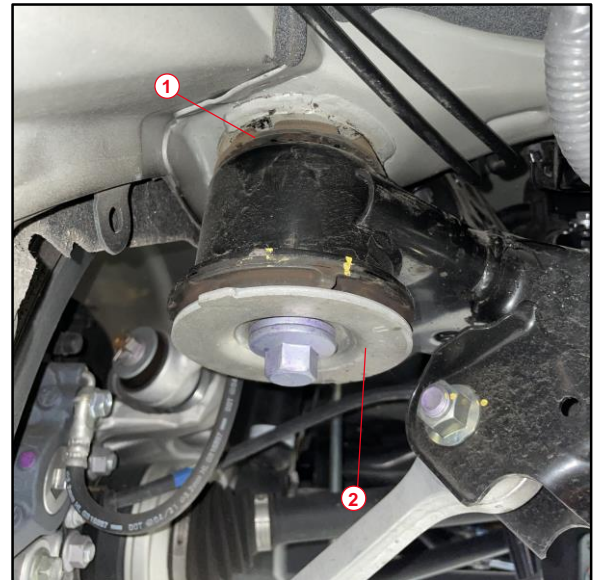
- **YES** — Continue to step 4.
- **NO** — This bulletin does NOT apply.
Continue diagnosis using the applicable Repair Manual.

Figure 1. Rear Member Front Left-hand Side



1	Front Upper Stopper
2	Front Lower Stopper

Figure 2. Rear Member Front Right-hand Side



1	Front Upper Stopper
2	Front Lower Stopper

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Repair Procedure (continued)

Figure 3. Rear Left Hand Lower Stopper



1	Rear Lower Stopper
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Figure 4. Rear Right Hand Lower Stopper



1	Rear Lower Stopper
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4. Disable the high voltage system and ensure there are 0 volts present at the inspection point BEFORE proceeding to the next steps.

Refer to TIS, applicable model and model year Repair Manual:

- [2021](#) / [2022](#) / [2023](#) Mirai:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Hybrid Battery System: Precaution”

5. Wearing insulated gloves, disconnect the motor cable.

Refer to TIS, applicable model and model year Repair Manual:

NOTE

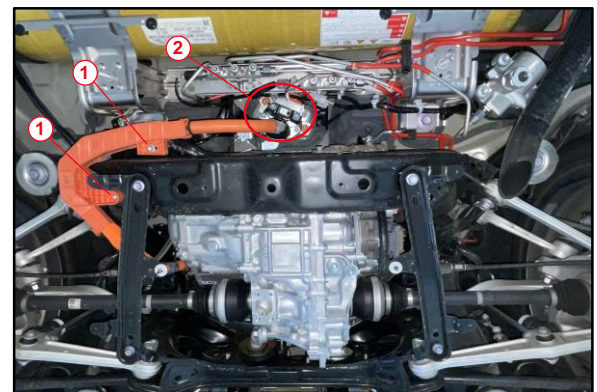
ONLY perform steps 24 – 25.

- [2021](#) / [2022](#) / [2023](#) Mirai:
Suspension – Rear Suspension – “Rear Suspension: Rear Suspension Member: Removal”

NOTE

Cover the motor cable connector once it is disconnected.

Figure 5.



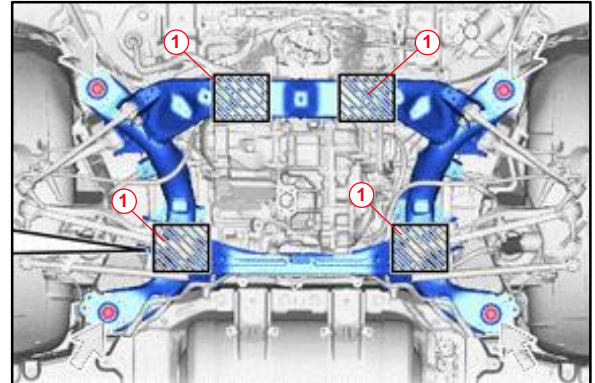
1	Bolts
2	Motor Cable

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Repair Procedure (continued)

6. Use an engine lifter or transmission jack to support the rear suspension member sub assembly.

Figure 6.



1	Support Locations
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7. Remove ALL four rear suspension member sub assembly bolts.

8. Lower the rear suspension member sub assembly until there is enough clearance to remove and replace the front upper stoppers.

Figure 7. Remove the Upper Stopper



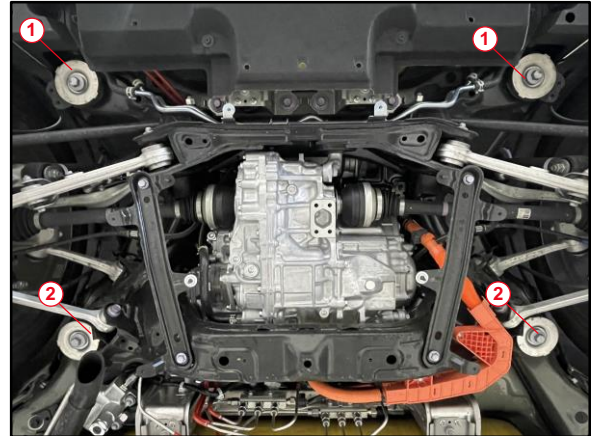
1	Front Upper Stopper
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Repair Procedure (continued)

9. Remove and replace ALL four lower stoppers, ensuring correct placement of the stoppers.

Figure 8.



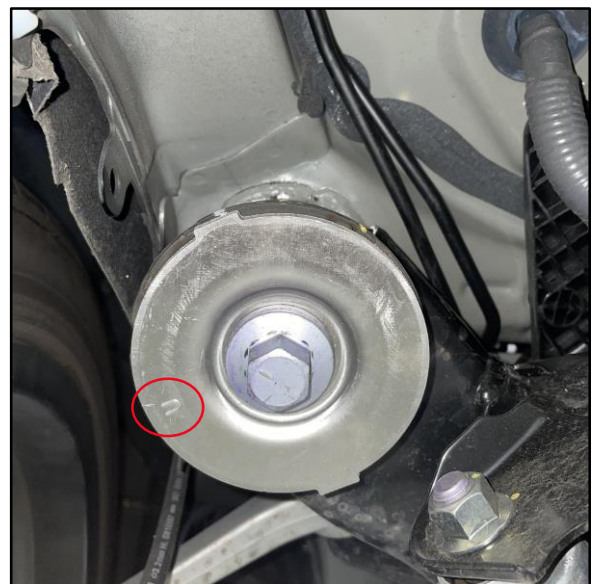
1	Rear Lower Stoppers
2	Front Lower Stoppers

10. Refer to the stamped marking on the lower stoppers. RR is for the rear lower stopper, and U is for the front lower stopper, as shown below.

Figure 9. Rear Lower Stopper



Figure 10. Front Lower Stopper



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Repair Procedure (continued)

11. Raise the rear suspension member sub assembly until there is no clearance between the rear suspension member sub assembly and the vehicle body.

12. Install and torque all four rear suspension member sub assembly bolts.

Torque: 135 N·m {1377 kgf·cm, 100 ft·lbf}

13. Wearing insulated gloves, reinstall the motor cable.

Refer to TIS, applicable model and model year Repair Manual:

NOTE

ONLY perform steps 33 – 34.

- [2021](#) / [2022](#) / [2023](#) Mirai:
Suspension – Rear Suspension – “Rear Suspension: Rear Suspension Member: Installation”

14. Wearing insulated gloves, connect the the FC converter power outlet cable.

Refer to TIS, applicable model and model year Repair Manual:

NOTE

ONLY perform steps 13 and 23.

- [2021](#) / [2022](#) / [2023](#) Mirai:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Inverter With Converter: Installation”

15. Wearing insulated gloves reinstall the service plug grip.

Refer to TIS, applicable model and model year Repair Manual:

- [2021](#) / [2022](#) / [2023](#) Mirai:
Engine/Hybrid System – Hybrid/Battery Control System – “Hybrid / Battery Control: Service Plug Grip: Installation”

Creak or Click Type Noise From Rear Over Bumps or When Braking

Repair Procedure (continued)

16. Confirm the condition no longer exists.
 - A. Test-drive the vehicle over a speed bump or uneven surface.
 - B. Is there a creaking or click type noise present during braking, or when driving over speed bumps and uneven surfaces?
 - **YES** — Continue to step 17.
 - **NO** — The repair is complete.

17. Support the rear suspension member assembly.

18. Loosen all four rear suspension member assembly bolts.

19. Slightly lower, then raise, the suspension member assembly.

20. Re-torque all four rear suspension member sub assembly bolts.
Torque: 135 N·m {1377 kgf·cm, 100 ft·lbf}

21. Repeat step 16.