

Seat Noise During Forward/Rearward Operation

Service Category Vehicle Interior

Section Seat

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2020	Supra	

Introduction

Some 2020 model year Supra vehicles may exhibit a noise during normal seat operation while moving in the forward or rearward direction. This condition occurs more frequently in hot conditions where the vehicle interior temperatures are high. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles with confirmed noise during normal seat operation produced **BEFORE** the Production Change Effective Date shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE DATE
Supra	Graz	N/A	08/01/2019

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
	Oil Seat Motor Driveshafts	1.0	N/A	91	55
	Opposite Side	0.5			

APPLICABLE WARRANTY

- This repair is covered under the Toyota Standard 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.

Seat Noise During Forward/Rearward Operation

Required Tools & Equipment

REQUIRED TOOLS & MATERIAL	QUANTITY
3-IN-ONE® Telescoping Spout Multi-Purpose Oil	1

Repair Procedure

NOTE

This repair is ONLY to be performed if the seat is confirmed to have an operation noise as described in the Introduction.

1. Remove the seat assembly.

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

- 2020 Supra:
Vehicle Interior – Seat – [“Seat: Front Seat Assembly \(for Power Seat\): Removal”](#)

2. Lie the seat on its back cushion to access the seat motor and driveshafts.

NOTICE

Ensure the seat back is protected when lying it down, as dirt, oil, and other contaminants can damage the leather on the seat.

Figure 1.

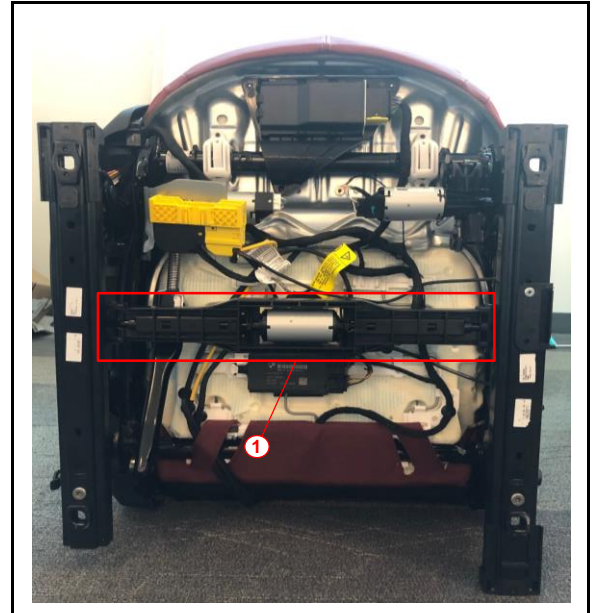


Seat Noise During Forward/Rearward Operation

Repair Procedure (continued)

3. Locate the seat motor drive carrier controlling forward/rearward motion on the bottom of the seat.

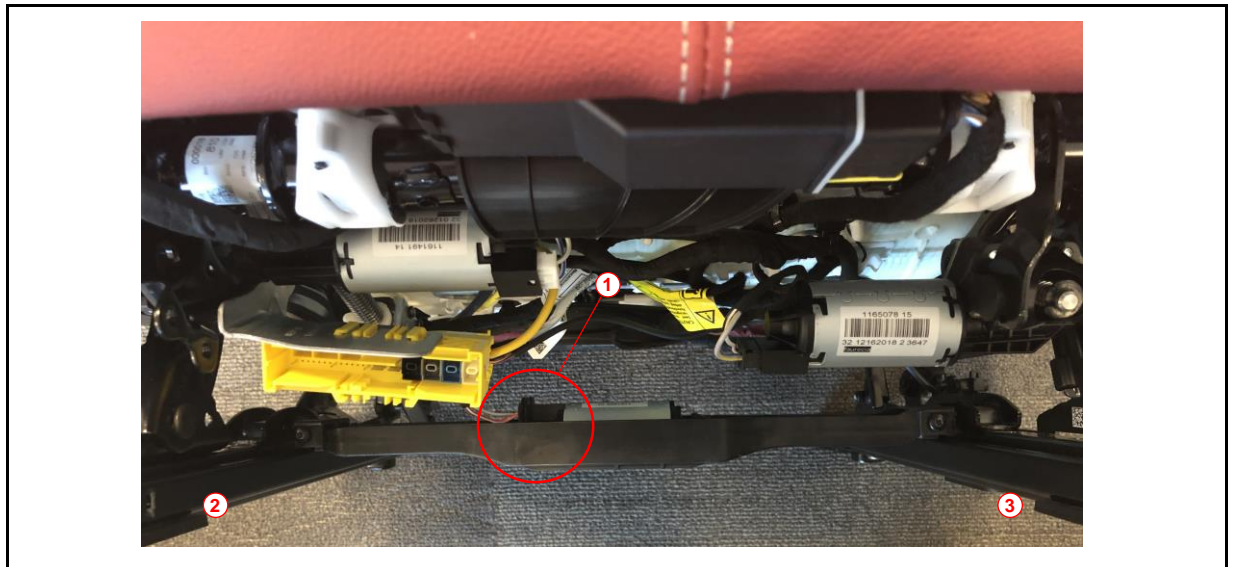
Figure 2.



1	Seat Motor Drive Carrier
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4. On the top of the carrier, locate and disconnect the drive motor wire harness connector on the left-hand side of the motor.

Figure 3.



1	Seat Motor Wire Harness Connector
2	Left-hand Side
3	Right-hand Side

Seat Noise During Forward/Rearward Operation

Repair Procedure (continued)

- Remove the motor from the carrier by pushing upward on the motor from the bottom side on the left-hand side first, then the right-hand side. Refer to Figures 4 and 5 for removal detail. Figure 5 also shows the motor COMPLETELY unclipped from the housing.

Figure 4.



1	Pushing Direction
2	Left-hand Side

Figure 5.



1	Pushing Direction
2	Right-hand Side

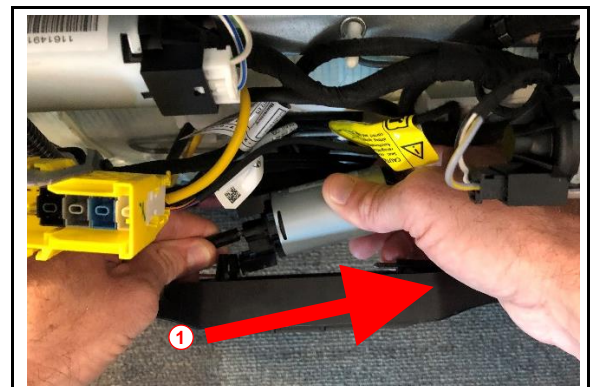
- Remove the motor driveshaft (right-hand or left-hand side, ANY order is OK) from the motor by pulling outward, and remove the motor from the opposite driveshaft to remove the motor from the carrier.

Figure 6.



1	Pulling Direction
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Figure 7.



1	Pulling Direction
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Seat Noise During Forward/Rearward Operation

Repair Procedure (continued)

7. Remove the driveshafts from the carrier by pulling inboard relative to the seat. Figure 8 shows the left-hand side removal, right-hand side removal pulling direction opposite to the left-hand.

NOTE

Keep the driveshaft sleeves on the driveshafts, except when oiling, to prevent contamination to the driveshaft friction surface.

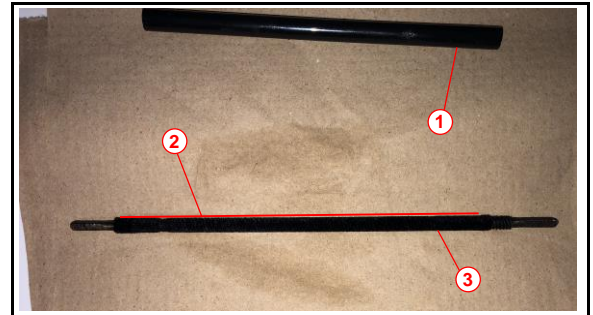
Figure 8.



1	Pulling Direction
2	Left-hand Side

8. Remove the driveshaft from the plastic sleeve and apply an even bead of 3-IN-ONE® Telescoping Spout Multi-Purpose Oil along the profile line shown (along the felt coating).
 - A. Use a paper towel or clean rag to apply the oil evenly over the felt and remove excess oil from the driveshaft. The oil should NOT drip AFTER application.
 - B. Reinsert the driveshaft to sleeve immediately AFTER oiling to prevent contamination to the driveshaft friction surface. Oil both right-hand and left-hand driveshafts, using the same process for BOTH sides.

Figure 9.



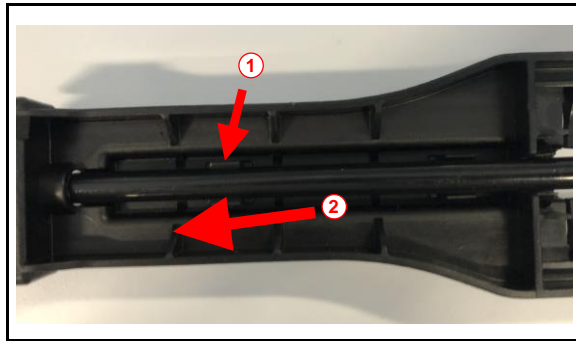
1	Sleeve
2	Oil Application Line
3	Driveshaft

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Repair Procedure (continued)

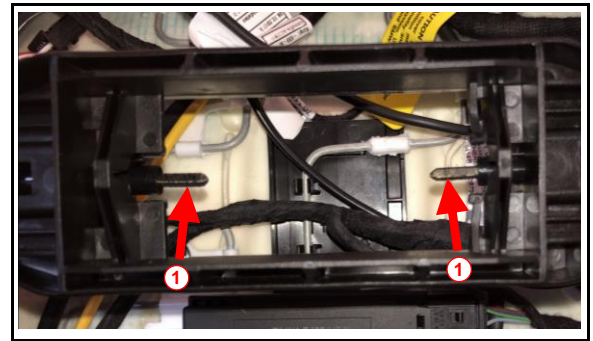
9. Insert the driveshaft into the motor drive carrier by clipping the outboard clip first and sliding the driveshaft into the seat drive gear (Figure 10 shows the top of the motor carrier clip locations). Follow this same procedure for the opposite side. You will know when the driveshaft and sleeve are fully installed by the position(s) shown in Figure 11. Driveshafts are interchangeable between left-hand and right-hand.

Figure 10.



1	Outboard Clip Location
2	Insertion Direction

Figure 11.

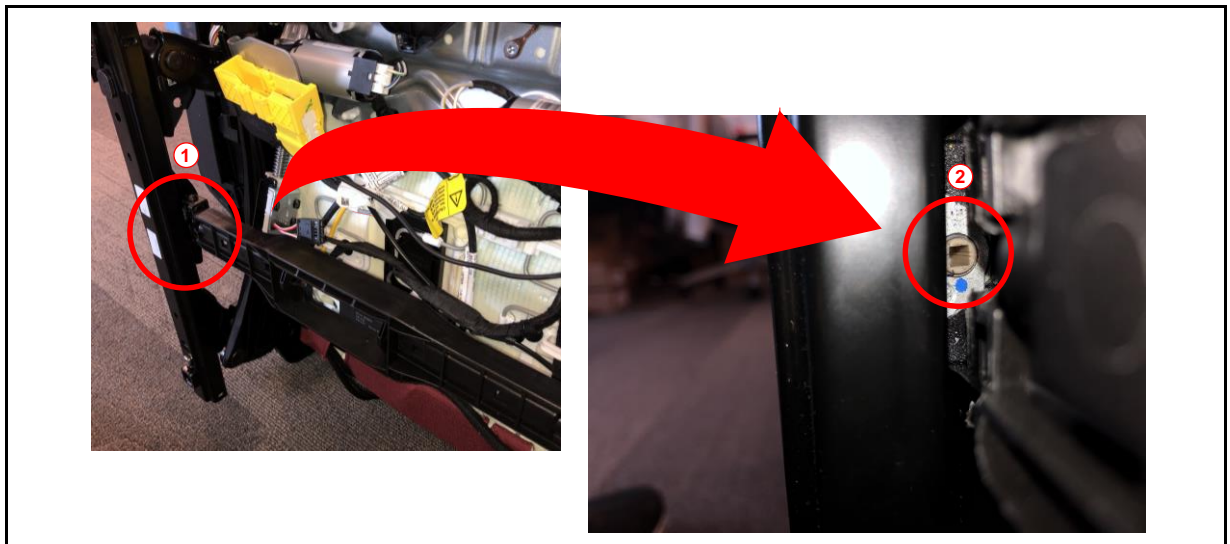


1	Driveshaft Locations After Full Insertion
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NOTE

Driveshaft alignment to seat drive gear is a square shape. You may need to rotate the driveshaft in the seat drive gear to fully insert the driveshaft. You can view the driveshaft insertion point to drive gear through a small view hole in the area highlighted below.

Figure 12.



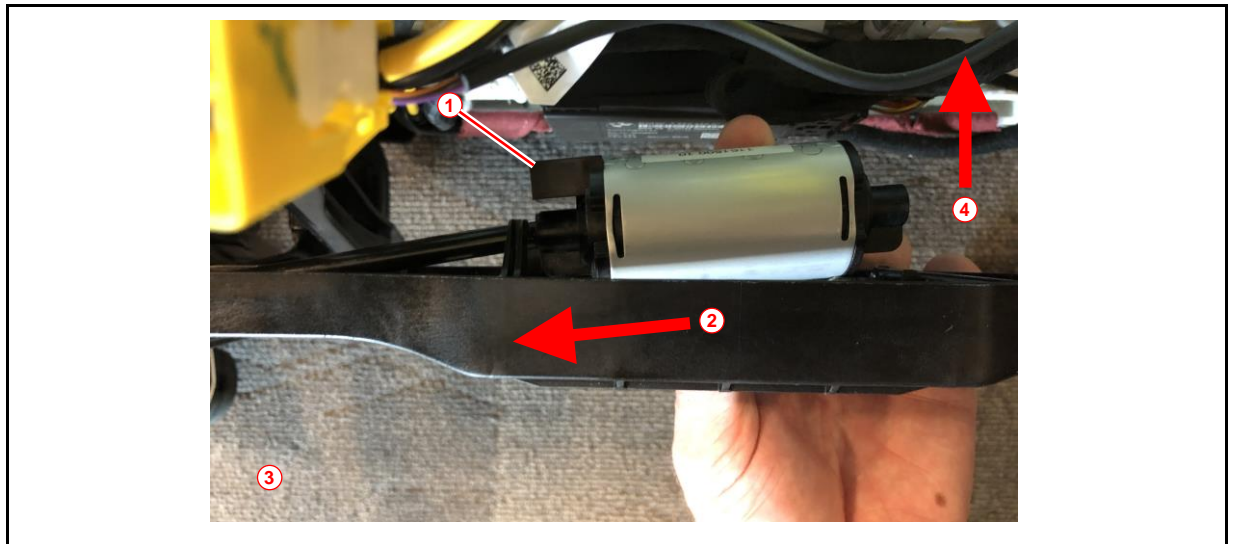
1	Seat Drive Gear Location
2	Seat Drive Gear Insertion Point

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Repair Procedure (continued)

10. Install the motor to one driveshaft. Ensure motor alignment to carrier by confirming the wire harness connector is facing the left-hand side in an upward direction.

Figure 13.



1	W/H Connector
2	Insertion Direction
3	Left-hand Side
4	Upward Direction

11. While holding the motor installed to the first driveshaft, install the second driveshaft to the motor. Some bending of the second driveshaft may be needed to fully install to the motor.

Figure 14.



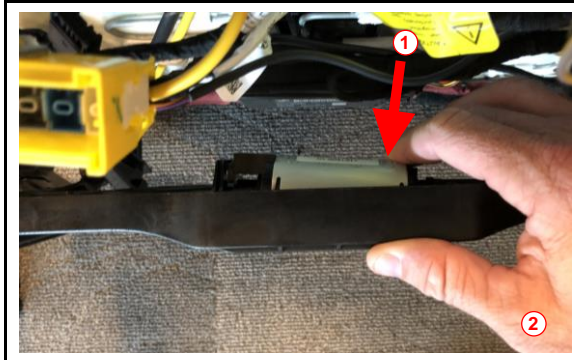
1	Insertion Direction
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Seat Noise During Forward/Rearward Operation

Repair Procedure (continued)

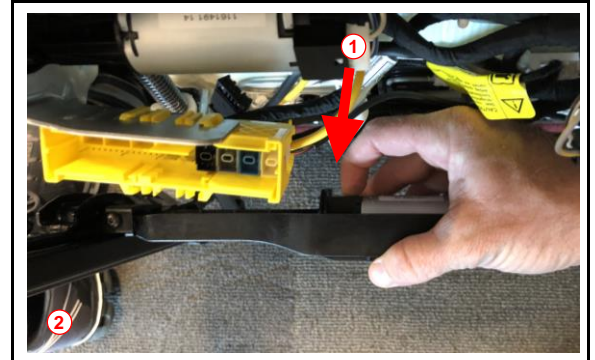
12. With BOTH driveshafts installed to the motor, clip the motor into the carrier by pressing DOWN on the top of the motor right-hand side first, then left-hand side. Ensure driveshafts are fully seated on the two right-hand and left-hand side carrier clips.

Figure 15.



1	Pushing Direction
2	Right-hand Side

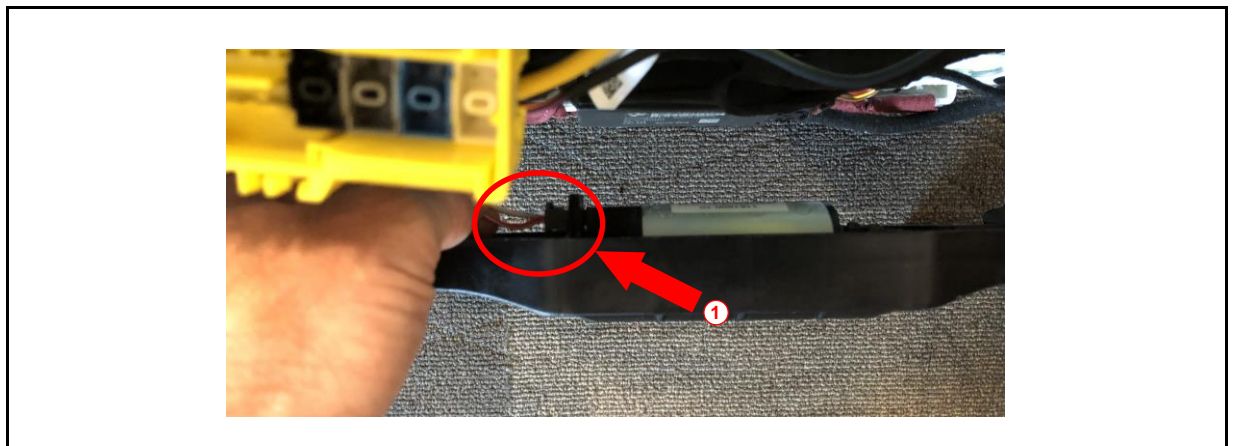
Figure 16.



1	Pushing Direction
2	Left-hand Side

13. Install the wire harness to the seat motor wire harness clip.

Figure 17.



1	Seat Motor Wire Harness Connector
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14. Reinstall the seat assembly to the vehicle.
Refer to TIS, applicable model and model year Repair Manual:
 - 2020 Supra:
Vehicle Interior – Seat – [“Seat: Front Seat Assembly \(for Power Seat\): Installation”](#)
15. Confirm proper operation and noise elimination.