



Tesla, Inc.
Service Bulletin

Inspect Front Stabilizer Bar For Squeak Noise

SB-20-31-001
July 24, 2020

Classification		Section/Group	Mobile Service
Repair Bulletin		31 - Suspension	Cannot Perform
Model Year	Model	Country/Region	Version
2019 - 2020	Model S, Model X	All	All

The model(s) and model year(s) listed are a general approximation of the affected VIN list. Refer to the VIN/Bulletin Tracker or Customer/Vehicle profile to determine applicability of this bulletin for a particular vehicle.

Repair Bulletin: This repair bulletin provides instructions on addressing a noted condition or possible customer concern regarding the operation of Tesla vehicles. These instructions should only be performed by trained professionals.

Condition

Some Model S and Model X vehicles might have front stabilizer bars with improperly vulcanized bushings that make a squeak noise when driving over road imperfections.

Correction

Inspect the vehicle for symptoms related to the condition. If symptoms are present, replace the stabilizer bar with one that has properly vulcanized bushings.

Correction Description	Correction	Time
SB-20-31-001 Not Applicable	S012031001	0.00
No Squeak Noise From Front Suspension During Test Drive	S022031001	0.30
Inspect Front Stabilizer Bar Bushings; No Squeak Noise (Model X)	S032031001	0.60
Inspect Front Stabilizer Bar Bushings; No Squeak Noise (Model S)	S042031001	0.65
Inspect And Replace Front Stabilizer Bar For Squeak Noise (Model X)	S052031001	4.35
Inspect And Replace Front Stabilizer Bar For Squeak Noise (Model S)	S062031001	4.45

Part Number	Description	Quantity
Parts Required 2007090-00-C	NUT HF M10x1.25 PC10 PTP COLORED	2
If Necessary:	For Model S	
1059386-00-B	FR STABAR, 24MM	1
1022543-00-B	BLT,HEX,M6-1.00X30 + PATCH	4
1138547-00-A	BATTERY BOLTS, SERVICE REPAIR KIT, SX	1
1037743-00-A	BOLT PF M6x40 PC109 ECOFIX	2
2007059-00-B	NUT HFPT M10x1.50 [10]-ZnNi	4
1004356-00-B	NUT HFPT M14-2.00 [10] ZnNi-W	2
	For Model X	
2007206	BLT,HEX,FLG,M6-1.00x25[8.8]-09	4
1027386-00-A	FR STABAR ASSY 25MM	1
1138547-00-A	BATTERY BOLTS, SERVICE REPAIR KIT, SX	1
1037743-00-A	BOLT PF M6x40 PC109 ECOFIX	2
1004356-00-B	NUT HFPT M14-2.00 [10] ZnNi-W	2
2007059-00-B	NUT HFPT M10x1.50 [10]-ZnNi	2

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the [Parts Catalog](#).

Special Tools	1027589-00-E	Subframe Fixture
	1021242-00-C	Subframe Fixture, Front Jig - MDLS
	1066521-00-A	Powertrain Table
	1020566-00-E	Batt Man Lift Table - MDLS
	1026526-00-C	HV Battery Alignment Rods
	1028149-00-A	Tool, HV RapidMate Install
	1038478-00-A	Asy,Cover,HV Rapid,HV Bat,MDLS
	1028325-00-A	Asy,Cover,LV Rapid,HV Bat,MDLS

Shop Supplies Paint pen

Procedure

1. Perform a short test drive where the vehicle travels slowly over large speed bumps, curbs cuts, or road imperfections that will substantially compress or extend the front suspension.
2. While moving over the speed bump, curb cut, or road imperfection, listen for a squeak noise from the front suspension.
 - If there is no squeak noise, then this bulletin does not apply. Discontinue this procedure.
 - If there is a squeak noise, continue to the next step.
3. Remove both front wheels (refer to Service Manual procedure 34012401).
4. Raise the vehicle to a working height.
5. Remove and discard the nuts that attach both stabilizer bar links to the front stabilizer bar and remove the links from the stabilizer bar (Figure 1).

⚠ CAUTION: Use a wrench to hold the stabilizer link ball joint stud while removing the nut to prevent stabilizer link ball joint damage.



Figure 1 – Model X (LH side shown for clarity, Model S similar)

6. Use a pry bar to move the end of the front stabilizer bar up and down on each side of the vehicle (Figure 2):
 - If there is no squeak noise from either side when moving the stabilizer bar end up and down, this bulletin does not address the source of the squeak noise. Skip to step 10.
 - If there is a squeak noise from either side when moving the stabilizer bar end up and down, the stabilizer bar is to be replaced. Continue to the next step.



Figure 2 – Model X (LH side shown for clarity, Model S similar)

7. Inspect the replacement stabilizer bar for a green paint mark on a rubber bushing and a yellow paint mark on the bushing mount verifying proper vulcanization of the bushings.

! CAUTION: If both the green and yellow marks are missing, do not install that stabilizer bar, return it to MRB.

8. Replace the front stabilizer bar (refer to Service Manual procedure 31012202), however, do not attach the stabilizer links to the stabilizer bar or install the wheels as of yet.

NOTE: Do not discard the defective stabilizer bar. Return the defective stabilizer bar to MRB.

9. Use the pry bar to move the end of the replacement front stabilizer bar up and down on each side of the vehicle (Figure 2):
 - If there is still a squeak noise from either side when moving the stabilizer bar end up and down, escalate a Toolbox session and wait for further instruction.
 - If there is no squeak noise from either side when moving the stabilizer bar end up and down, continue to the next step.
10. Install the stabilizer links onto the front stabilizer bar, and then install new nuts to attach the links to the stabilizer bar (torque 70 Nm) (Figure 1).

! CAUTION: Use a wrench to hold the stabilizer link ball joint stud while installing the nut to prevent stabilizer link ball joint damage.

11. Install both front wheels (refer to Service Manual procedure 34012401).