



Replace Front Air Spring Modules

Classification	Repair Bulletin	Section/Group	31 - Suspension	Country/Region	All
Year	2017, 2018	Model	Model S	Version	All

Bulletin Classification: *This repair bulletin provides instructions and guidelines for a noted condition or a customer concern. The information provided can address a broad range of known or perceived issues with the operation of Tesla vehicles. This bulletin might not be VIN-specific. These instructions assume knowledge of motor vehicle and high voltage electrical component repairs, and should only be executed by trained professionals. Tesla assumes no liability for injury or property damage due to a failure to properly follow these instructions or repairs attempted by unqualified individuals.*

Condition

On some Model S vehicles equipped with air suspension, a front-end rattle noise might come from behind the IP carrier when traveling over road transitions. For example, when traveling from driveway to street, or from asphalt to concrete. The noise is generated from a vibration harshness that otherwise has no detrimental effect on the vehicle.

Correction

Upon customer complaint, inspect the vehicle for symptoms related to the condition. If symptoms are present, replace both front air spring modules.

Correction Description	Correction	Time
SB-18-31-009 Not Applicable	S011831009	0.0
Inspect Vehicle, Front-End Rattle Noise Remains During Temporary Modification	S021831009	0.45
Inspect Vehicle And Replace Front Air Spring Modules	S031831009	1.3

Required Part(s):	Part Number	Description	Quantity
If necessary:	1067361-77-C	AIR SPRING MODULE FR - MS2 DM SRVC	2

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

Procedure

1. Remove the rear underhood apron (refer to Service Manual procedure 12251102).

2. Remove the LH and RH underhood aprons (refer to Service Manual procedure 12251202).
3. Bring two shop towels, a 13mm socket, and a torque wrench during the road test to perform a temporary modification as follows:
 - a. Locate a street or parking lot of good road surface, where a short road test that reproduces the noise can be safely and consistently conducted at low speeds in observance of local traffic laws.
 - b. Repeat the road test several times to establish a course, and to familiarize yourself with the front-end rattle noise.
 - c. Remove the bolts (x2) that attach the shock tower brace to the LH shock tower (Figure 1).

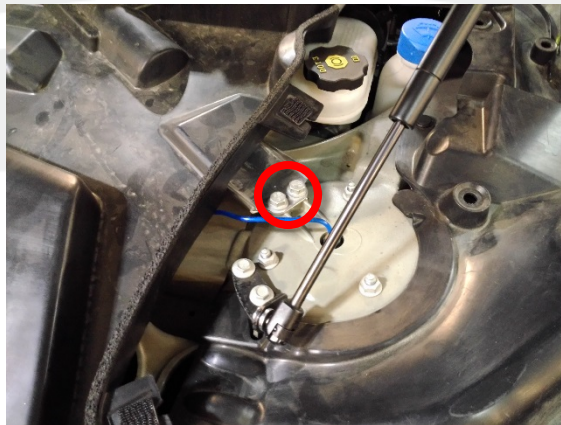


Figure 1 (LH shock tower shown)

- d. Remove the bolts (x2) that attach the shock tower brace to the RH shock tower.
- e. Lift the shock tower braces away from the shock towers, and then insert a double-folded shop towel between the braces and towers so that they do not make contact or transfer vibration to each other (Figure 2).

NOTE: Do not reinstall the shock tower brace bolts.



Figure 2 (LH shock tower shown)

- f. Perform the road test again, listen, and note the existence of the front-end rattle noise.

- g. Remove the shop towels, move the shock tower braces back to the LH and RH shock towers, and then install the bolts (x4) that attach the braces to the towers (torque 20 Nm) (Figure 1).
4. If during the road test (after removing the shock tower brace bolts):
- The front-end rattle noise was not heard, discontinue this procedure and replace the LH and RH front air spring modules (refer to Service Manual procedure 31105002).
 - The front-end rattle noise was still heard, then the noise is not resolved by this bulletin. Continue to the next step.
- NOTE:** Refer to Toolbox articles, for example #27522, #27520, and #31344, to help identify the source of the noise.
5. Install the LH and RH underhood aprons (refer to Service Manual procedure 12251202).
6. Install the rear underhood apron (refer to Service Manual procedure 12251102).

Affected VIN(s) Affected Model S vehicles built after approximately March 12, 2017.

NOTE: This is a simplified summary 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.

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