

 <b>Tesla, Inc.</b> <b>Service Bulletin</b>		<h2 style="margin: 0;">Inspect Front Lower Lateral Links</h2>	
<b>SB-21-31-003</b> December 2, 2021		<b>R3</b>	
<b>Classification</b> Recall Bulletin		<b>Section/Group</b> 31 - Suspension	<b>Mobile Service</b> Limited
<b>Model Year</b> 2019–2021	<b>Model</b> Model 3, Model Y	<b>Country/Region</b> All	<b>Version</b> All
<small>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.</small>			

Recall Bulletin: Recall Bulletins are mandatory service procedures that must be carried out by Tesla-certified Service Centers. Recall work performed by uncertified technicians could lead to unsafe conditions or voided warranty provisions.

*This Service Document supersedes SB-21-31-003 R2, dated 12-Nov-21. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.*

### Condition

On certain Model 3 and Model Y vehicles, the bolts that secure the front lower lateral links to the subframe may not have been torqued to internal specification.

### Correction

Inspect and confirm that all bolts that secure the front lower lateral links to the subframe are torqued to internal specification. If symptoms relating to the condition are present, re-torque the bolts to internal specification. If necessary, replace the front subframe and/or the front lateral links.

**NOTE:** Mobile Service can only perform inspection of the front lower lateral link bolts (refer to [Inspection Only \(Mobile Service\)](#)). If the bolts are properly torqued, Mobile Service can close the bulletin by using Correction Code S132131003. If any bolts are not properly torqued, the vehicle must be towed to a Service Center for any additional work required; use Correction Code 31000010 to track labor for the inspection. The bulletin should remain open, and should be closed by the Service Center after the repair is performed.

Correction Description	Correction	Time (Model 3)	Time (Model Y)
Inspect Vehicle; Front Lower Lateral Link Bolts Properly Torqued (Service Center)	S012131003	0.15	0.20
Inspect Vehicle; Replace LH Front Lower Lateral Link	S022131003	0.60	0.65
Inspect Vehicle; Replace RH Front Lower Lateral Link	S032131003	0.60	0.65
Inspect Vehicle; Replace LH and RH Front Lower Lateral Links	S042131003	0.70	0.75
Inspect Vehicle; Replace Front Subframe (RWD)	S052131003	2.05	1.85
Inspect Vehicle; Replace LH Front Lower Lateral Link And Front Subframe (RWD)	S062131003	2.10	1.90
Inspect Vehicle; Replace RH Front Lower Lateral Link And Front Subframe (RWD)	S072131003	2.10	1.90
Inspect Vehicle; Replace LH and RH Front Lower Lateral Links And Front Subframe (RWD)	S082131003	2.15	1.95
Inspect Vehicle; Replace Front Subframe (Dual Motor)	S092131003	2.95	3.50
Inspect Vehicle; Replace LH Front Lower Lateral Link And Front Subframe (Dual Motor)	S102131003	3.00	3.55
Inspect Vehicle; Replace RH Front Lower Lateral Link And Front Subframe (Dual Motor)	S112131003	3.00	3.55

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Inspect Vehicle; Replace LH and RH Front Lower Lateral Links And Front Subframe (Dual Motor)	S122131003	3.05	3.60
Inspect Vehicle; Front Lower Lateral Link Bolts Properly Torqued (Mobile Service)	S132131003	0.20	0.20



Part Number	Description	Quantity
<b>Parts Required</b> –	–	–
<b>If Necessary</b>	<b>Model 3 and Model Y</b>	
1109263-00-B	NUT&WSHR[SW],M14x1.5,[10],ZNFL,PTP	2
1111145-00-A	NUT,HF,M10-1.5,[10],ZNNI,PTP	4
1456640-00-A	DBL,HF,M14x120+M10x16,CMAT,[109],ZNFL	2
1461654-00-A	BOLT,HF,M10-1.5x94,[109],ZNFL,CMAT	2
1461643-00-A	BOLT,HF,M12-1.75x99,[109],ZNFL,CMAT	2
1111543-00-A	NUT,HF,M12-1.75,[10],ZNNI,PTP	2
1109912-00-A	BOLT,HF,M14-2.0x65,STL[109],ZNFL	1-4
	<b>Dual Motor Vehicles</b>	
1115558-00-A	NUT&WSHR[SW],M24, STL[8],ZNFL,SERR	2
1117669-00-A	BOLT,5-LOBE,M6x19,[109],ZNNI,MAT,PTP,SEAL	2
	<b>Model 3 Only</b>	
1044341-00-D	FR LWR LATERAL LINK ASSY	1-2
1111151-00-A	BOLT,HF,M10-1.5x30,[109],ZNFL,SMAT	2
	<b>One of the following:</b>	
• 1044531-00-B or 1044531-00-C*	FR SUBF ASSY MDL3/Y FR SUBF ASSY MDL3/Y	1 1
• 1044521-10-N or 1044521-11-N **	FR SUBFRAME STRUCTURE FR SUBF ASSY, MDL3/Y	1 1
	<b>Model Y Only</b>	
1188341-00-C	FRONT LOWER LATERAL LINK ASSEMBLY	1-2
1044531-00-B	FR SUBF ASSY MDL3/Y	1
1461652-00-A	BOLT,HF,M10-1.5x36,[109],ZNFL,CMAT	2

\* For front subframes 1044521-00-N with M10 steering gear nuts.

\*\* For front subframes 1044521-00-N and earlier with M8 steering gear nuts.

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

	<b>All Vehicles</b>
1066521-00-A	Powertrain Table
1071271-00-A	Chassis Height Measurement Tool
1090880-00-A	Steering Wheel Holder
1049463-00-A	Steering Wheel Level
1099645-00-C	Subframe Fixture
1115118-00-B	Socket Internal Torx Plus 3/8in Dr. T40
1090881-00-A	Brake Pedal Depressor
	<b>Dual Motor Vehicles</b>
1059330-00-B	Socket External Torx 1/4in Dr. E10 5-Lobe
1096075-00-A	Hydraulic Hub Puller
1133187-00-A	Socket External Torx 1/2in Dr. E18
1050448-00-B	Vacuum Refill Tool
1083188-00-B	Multimeter
1130480-02-A	Slim Test Probes
1135762-00-A	Coolant Hose Plug Kit
1498673-00-A	Cable Axle Removal Kit
1081547-00-A	Slide Hammer
1130279-00-A	Drive Unit Sling
1140311-00-A	HV Connector Lever Lock
1065131-00-A	Battery Coolant Drain Kit
1479505-00-A	M3/Y Vacuum Fill Adapter
	<b>Mobile Service Inspection</b>
1080589-00-A	Wheel Chocks
1054717-01-A	Jack Stand, Jackpoint

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**Shop Supplies** THREADLOCKER, LOCTITE 222, PURPLE  
Molykote M-77 (For Dual Motor Vehicles)



## Procedure (Service Center)

1. Remove the front aero shield panel (refer to Service Manual procedure 12030102; [Model 3](#), [Model Y](#)).
2. Perform a torque check on the bolts that attach the LH and RH front lower lateral links (4 bolts total) to the front subframe (115 Nm) (Figure 1).

**⚠ CAUTION:** Check that the bolt heads are fully flush with the lateral link flanges and that there are no gaps between the bolt heads, flanges, and subframe. Gaps between these components are a sign of possible cross threading and should be investigated.



Figure 1 – LH shown; RH similar

- If all 4 bolts are already torqued to specification and no signs of cross threading are observed, the subframe does not need replacement. Take note and skip to step 7.
  - If any of the 4 bolts are missing, damaged, not already torqued to specification, or if signs of cross threading are observed, continue to step 3.
3. Inspect the front lateral link and front subframe to lateral link attachment point (Figure 2), noting damage such as cracks, bent arms/flanges, or damaged bolts.



Figure 2 – LH shown; RH similar

- If damage to the front subframe has been observed in steps 2 or 3 (such as cross threading, cracks, bent arms/flanges, or damaged bolts), take note and skip to step 6.
- If damage to the front subframe is not observed, take note and continue to step 4.

4. Remove any damaged front lower lateral links, and then hand tighten new lateral link(s) to the front knuckle and front strut. Do not attach the new lateral link(s) to the front subframe yet (refer to Service Manual procedure 31013402; [Model 3](#), [Model Y](#)).
5. Where front lateral link to subframe bolt(s) are missing, damaged, or not torqued to specification, attempt to install new bolt(s) (115 Nm) (Figure 1).

**⚠ CAUTION:** Check that the bolt heads are fully flush with the lateral link flanges and that there are no gaps between the bolt heads, flanges, and subframe. Gaps between these components are a sign of possible cross threading and should be investigated.

- If all new bolts can be torqued to specification and no signs of cross threading are observed, the front subframe does not need replacement. Take note and skip to step 6.
- If any of the new bolts cannot be torqued to specification, or if signs of cross threading are observed, the front subframe needs replacement. Take note and continue to step 6.

6. Replace all parts noted as damaged.

**⚠ CAUTION:** If new front lateral link(s) were installed in step 4, make sure to fully torque the fasteners that attach the front lateral link(s) to the front knuckle and front strut (refer to Service Manual procedure 31013402; [Model 3](#), [Model Y](#)).

- RWD Front Subframe (refer to Service Manual procedure 30010302; [Model 3](#), [Model Y](#)).
- Dual Motor Front Subframe (refer to Service Manual procedure 30010312; [Model 3](#), [Model Y](#)).
- LH and/or RH Front Lower Lateral Link (refer to Service Manual procedure 31013402; [Model 3](#), [Model Y](#)).

**📄 NOTE:** If replacing a lateral link AND a front subframe, replace the link after the subframe has been removed from the vehicle.

**📄 NOTE:** If the lateral links were replaced in step 4, there is no need to replace them again.

7. Install all parts that were removed for access.

## Inspection Only (Mobile Service)

1. Chock the RH rear wheel (Figure 3).



Figure 3

2. Remove the LH front wheel cap (refer to Service Manual procedure 34015021; [Model 3](#), [Model Y](#)).

3. Loosen the LH front wheel (Figure 4).



**Figure 4**

4. Raise and support the LH front of the vehicle (refer to Service Manual procedure 10000605; [Model 3](#), [Model Y](#)).
5. Remove the LH front wheel lug nuts (Figure 5), and then remove the LH front wheel from the vehicle.



**Figure 5**

6. Repeat step 1 through step 5 to lift the RH front of the vehicle.
7. Remove the bolts (x4) that attach the corners of the front aero shield panel to the vehicle (Figure 6).

**⚠ WARNING:** *Do not work under the vehicle to remove the bolts.*



**Figure 6**

8. Perform a torque check on the bolts that attach the LH and RH front lower lateral links (4 bolts total) to the front subframe (115 Nm) (Figures 7-9).

**⚠ CAUTION:** Check that the bolt heads are fully flush with the lateral link flanges and that there are no gaps between the bolt heads, flanges, and subframe. Gaps between these components are a sign of possible cross threading and should be investigated.



Figure 7 – LH shown; RH similar



Figure 8 – Front Bolt



Figure 9 – Rear Bolt

- If all 4 bolts are already torqued to specification and no signs of cross threading are observed, the subframe does not need replacement. Install all parts that were removed for access and close this bulletin using Correction Code S132131003.
- If any of the 4 bolts are missing, damaged, not already torqued to specification, or if signs of cross threading are observed, install all parts that were removed for access, and tow the vehicle to a Service Center for further inspection. Use Correction Code 31000010 to track work performed, but DO NOT close the bulletin.