

 <b>Tesla, Inc.</b> <b>Service Bulletin</b>		<h2><i>Inspect Lower Steering Column I-Shaft Operation</i></h2>	
<b>SB-20-32-004</b> June 17, 2020			
<b>Classification</b>		<b>Section/Group</b>	<b>Mobile Service</b>
Repair Bulletin		32 - Steering	Model S RWD only
<b>Model Year</b>	<b>Model</b>	<b>Country/Region</b>	<b>Version</b>
2015 - 2020	Model S, Model X	North America, Europe, Middle East, Africa	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>			

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 exhibit stiff steering due to corrosion at the lower steering column I-shaft U-joint.

### Correction

Inspect vehicle steering action for symptoms related to the condition. If symptoms are present, replace the I-shaft.

Correction Description	Correction	Time
SB-20-32-004 Not Applicable	S012032004	0.00
Inspect Vehicle; I-Shaft Replacement Not Needed	S022032004	0.10
Inspect Lower Steering Column I-Shaft U-Joint; Replace Shaft (Model S RWD)	S032032004	0.40
Inspect Lower Steering Column I-Shaft U-Joint; Replace Shaft (Model S Dual Motor)	S042032004	0.60
Inspect Lower Steering Column I-Shaft U-Joint; Replace Shaft (Model X)	S052032004	1.35

	Part Number	Description	Quantity
<b>If Necessary</b>	1561233-00-A	<b>All Model S</b> KRYTOX GPL-224 GREASE	1
	2007098	BOLT H M8x1.25x35 [10.9]-G720	1
	1108552-00-A	BOLT HX, M10X30, STL[109] ZNFL, SEAL	1
	1060802-00-B	STEERING I-SHAFT LINK LOWER	1
	1006883-00-A	<b>All Model S built before July 2017</b> NUT HF M10x1.5 ZnAl	1
	1008722-00-A	<b>Model S Dual Motor</b> BOLT HF M8x30 PC109 ADH MAT	4
	1037743-00-A	BOLT PF M6x40 PC109 ECOFIX	2
	1561233-00-A	<b>All Model X</b> KRYTOX GPL-224 GREASE	1
	2007206	BLT,HEX,FLG,M6-1.00x25[8.8]-09	4
	2007098	BOLT H M8x1.25x35 [10.9]-G720	1
	1108552-00-A	BOLT HX, M10X30, STL[109] ZNFL, SEAL	1
	1008722-00-A	BOLT HF M8x30 PC109 ADH MAT	4
	1037743-00-A	BOLT PF M6x40 PC109 ECOFIX	2
	1027821-00-B	<b>LHD Model X built before October 16, 2016</b> STEERING I-SHAFT LINK LOWER, LHD	1
	1027826-00-B	<b>LHD Model X built on or after October 16, 2016</b> MX LOWER I-SHAFT	1
	1006883-00-A	<b>LHD Model X built before July, 2017</b> NUT HF M10x1.5 ZnAl	1
	1027828-00-B	<b>All RHD Model X</b> MX RHD LOWER I-SHAFT	1

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

**Shop Supplies** Paint Brush

## Procedure

1. With the vehicle in Park and the brake pedal depressed, perform 4 lock-to-lock steering inputs, noting any friction, grinding, or other abnormal sensations from the steering wheel. Repeat this test with the brake pedal released.
  - If any abnormal sensations were observed, replace the lower steering column i-shaft, install all components that were removed for access, and then end this procedure.
    - **Model S RWD:** Refer to Service Manual procedure [32011102](#).
    - **Model S Dual Motor:**
      - **1<sup>st</sup> generation: (built before April 10, 2016):** Refer to Service Manual procedure [32011602](#).
      - **2<sup>nd</sup> generation: (built after April 10, 2016):** Refer to Service Manual procedure [32011652](#).
    - **Model X:** Refer to Service Manual procedure [32011602](#).
  - If no abnormal sensations were observed, continue to the next step.

2. Raise the vehicle on a 2 post lift so that all 4 wheels are off the ground (refer to Service Manual procedure 10000205).



**NOTE:** This procedure can be performed on Model S RWD vehicles in a mobile environment by raising both front wheels. Refer to Service Manual procedure [10000605](#) for information on supporting the vehicle on jack stands.

3. With the vehicle in Park and the brake pedal released, perform 4 lock-to-lock steering inputs, noting any friction, grinding, or other abnormal sensations from the steering wheel.
  - If abnormal steering sensations are not observed, discontinue this procedure and continue diagnosis to identify the cause of the symptoms reported by the customer.
  - If any abnormal steering sensations are observed, replace the lower steering column i-shaft, install all components that were removed for access, and then end this procedure.
    - **Model S RWD:** Refer to Service Manual procedure [32011102](#).
    - **Model S Dual Motor:**
      - **1<sup>st</sup> generation: (built before April 10, 2016):** Refer to Service Manual procedure [32011602](#).
      - **2<sup>nd</sup> generation: (built after April 10, 2016):** Refer to Service Manual procedure [32011652](#).
    - **Model X:** Refer to Service Manual procedure [32011602](#).