TESLA	Tesla, Inc. Service Bulletin		Rear Touchscreen Bluetooth Audio Retrofit			
SB-24-21-001						
April 30, 2024						
Classification		Section/Group	Mobile Service	Configuration		
Repair Bulletin		21 - Infotainment	Can Perform (where permitted)	All		
Model Ye	ar Model		Country/Region	Build Location	·	
2021	Model S, Model X		All	Fremont	Fremont	
The model(s) a applicability of	nd model year(s) listed this bulletin for a particu	are a genera	al approximation of the affected VIN list	. Refer to the VIN/Bulletin Tracker or Custo	mer/Vehicle profile to determine	

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

Condition

On certain Model S and Model X vehicles built before November 1, 2021, the vehicle may lack Bluetooth headphone hardware support for the rear touchscreen audio.

Correction

Inspect the vehicle for the symptom related to the condition. If symptom is present, verify that the vehicle software version is 2023.44.30 or later, and if needed, replace the center console front USB hub assembly with an updated part.

Correction Description	Correction	Time
SB-24-21-001 Not Applicable	S012421001	0.00
Inspect Rear Touchscreen Bluetooth Audio; Enabled After Vehicle Software Version Update	S022421001	0.06
Inspect Rear Touchscreen Bluetooth Audio; Enabled After Front USB Hub Assembly Upgrade	S032421001	0.18

	Part Number	Description	Quantity
Parts If Necessary	1656787-00-А or 1656787-00-В	FRONT USB HUB ASSEMBLY	1
	These part numbers otherwise specified in	were current at the time of publication. Use the revisions listed or later, un the <u>Parts Catalog</u> .	Inless
Special Tool	1060071-00-A	Torque Wrench 1/4in Dr Hexagon	



Procedure

- 1. On the vehicle touchscreen, touch **Controls** (vehicle icon) > **Software**, and then scroll down to display the vehicle software version.
 - If the vehicle is operating with software version 2023.44.30 or later, go to step 2.
 - If the vehicle is operating with a software version earlier than 2023.44.30, update the software to version 2023.44.30 or later (refer to Service Manual procedure 00020003; <u>Model S</u>, <u>Model X</u>), and then continue to the next step.
- 2. Determine if the vehicle has Bluetooth headphones compatibility. Use one of the following methods described in the sections below:
 - Rear Touchscreen Method
 - Toolbox Method

Rear Touchscreen Method

On the vehicle rear touchscreen, touch Settings > Add New Device > Start Search.

- If the message "Wireless devices can be paired if they support Bluetooth Classic" appears (Figure 1), then the front USB hub assembly has the necessary Bluetooth hardware. Discontinue this procedure and use correction code S022421001.
- If the message "Some vehicles may require additional hardware to be compatible with headphone pairing" appears (Figure 2), then the front USB hub assembly is incompatible. Skip to "Front USB Hub Assembly Replacement Procedure" in this document.

Bluetooth Devices		Bluetooth Settings ×
Add New Device	+	
		Wireless devices can be paired if they support Bluetooth Classic.
		Wireless devices can be paired if they support Bluetooth Classic. O Searching Cancel

Figure 1

Bluetooth Devices		Bluetooth Settings	×
Add New Device	+	Wireless devices can be pai Bluetooth Classid Some vel additional hardware to be c headphone pairing.	red if they support hicles may require ompatible with
		C Searching	Cancel
< LO > 5 1	5	► <u></u>	< ◄((()) >

Toolbox Method

- 1. Connect to the vehicle remotely using Toolbox.
- 2. Click the Actions tab, and then click ICE Get directory contents.
- 3. Under the "ICE Get directory contents" screen (Figure 3), perform the following:
 - a. Select the "details" checkbox.
 - b. Type **ttyBT** in the "filter" field.
 - c. Type /dev in the "inputDir" field.

← → G is toolbox.tesia.com	l/sandbox	
> Q get directory		VIN
Articles Actions Dashboards	ICE Get directory contents	×
Model Y Clear All ×	Lists the files in a given directory on the car computer.	
	Additional Details List the contents of a directory. This is flexible and may be used to explore the filesystem. However, this Task has permissions and will not be able to read all directories. The filter input can be used to limit the results. For exam everything in /dev may yield over 400 results but filtering for 'mmcblk' will only show eMMC devices.	limited ple, listing
	details is an optional flag to include file ownership, size, modified date and more. False will only return file names.	
	filter 'filter' is an cotional pattern to filter results by, case-insensitive. ttyBT	
	hidden 'hidden' is an option flag to show hidden files	
No actions found	human_readable 'human_readable' is an optional flag to express file sizes in an easy format, ie 1.0G instead of 1024M	
	inputDir 'inputDirectory' is the directory to list. This must be an absolute path and does not support any special characters. This can list cras input is '/hor o/tesla/.Tesla/crashlogs', or syslogs if the input is '/var/log/syslog'	shlogs if the
	/dev	

Figure 3

- 4. Determine the raw output.
 - If the raw output shows "ttyBT-rear ->" (Figure 4), then the front USB hub assembly has the necessary Bluetooth hardware. Discontinue this procedure and use correction code S022421001.
 - If the raw output does not show "ttyBT-rear ->" (Figure 5), then the front USB hub assembly is incompatible. Continue to the "<u>Front USB Hub Assembly Replacement Procedure</u>" section next in this document.

Results	Raw Output				
error: null					
• resul	▼ results: {} 2 keys				
exi	exit_code: 0				
v od	in_output: [] 3 it	ems			
C	: "Irwxrwxrwx 1 re	ot root 5 Apr 14 12:00 ttyBT -> ttyS4"			
1:	"lrwxrwxrwx 1 ro	pt root 7 Apr 16 09:28 ttyBT-rear -> ttyACM0"			
Figure 4					
Results	Raw Output				
erro	r: null				
v results: {} 2 keys					
exit_code: 0					
▼ odin_output: [] 1 item					
0: "Irwxrwxrwx 1 root root 5 Apr 9 01:54 ttyBT -> ttyS4"					
debug: undefined					
		¥ Figure 5			

Front USB Hub Assembly Replacement Procedure

- 1. Replace the center console front USB hub assembly with the updated part (refer to Service Manual procedure 21260402; Model S, Model X).
- 2. Connect a laptop with Toolbox 3 to the vehicle (refer to Service Manual procedure; Model S, Model X).
- 3. In Toolbox, click **Dashboards** > **Infotainment Dashboard**, and then update "frontUsbHubType" to **1**.
- 4. Disconnect the laptop from the vehicle and use correction code S032421001.