

 Tesla, Inc. Service Bulletin		Rewrite Shunt Resistance Hex Value	
SB-20-16-002 March 04, 2020			
Classification		Section/Group	Mobile Service
Campaign Bulletin		16 - HV Battery System	Can Perform (where permitted)
Model Year	Model	Country/Region	Version
2020	Model 3	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.			

Campaign Bulletin: This campaign bulletin addresses a known non-safety-related condition and provides recommended technical diagnosis and repair procedures. Apply this procedure to all vehicles in the affected VIN list.

Condition

Certain Model 3 vehicles were configured with incorrect shunt resistance hex values that can affect charging capacity and range performance.

Correction

Rewrite the shunt resistance with the correct value for the vehicle.

Correction Description	Correction	Time
SB-20-16-002 Not Applicable	S012016002	0.00
Rewrite Shunt Resistance Hex Value	S022016002	0.15

Shop Supplies Paint pen

Procedure

⚠ CAUTION: This procedure has time-dependent steps. Reread through the entire procedure to become familiar before performing it.

📄 NOTE: The tool to display the correct shunt resistance hex value for a given VIN has been integrated into step 2 of this document.

1. Make sure that the vehicle is in Park, there is no charging cable connected, and the climate control system is completely powered off.
2. Double-click the yellow box below to activate the tool. Type the VIN in upper case, and press the Enter key to display the correct shunt resistance hex value for the vehicle.

DOUBLE-CLICK YELLOW BOX, THEN TYPE VIN	SHUNT RESISTANCE IN HEX

3. Click on this text to deactivate the tool in step 2.
4. Record the entire shunt resistance hex value, including the leading zeros, and have it standing by for step 9.
5. Connect a laptop with Toolbox to the vehicle.

6. In Toolbox, select the **Actions/Autodiag** tab, type “contactors” into the search field, and click **Ensure Power Off** (Figure 1).

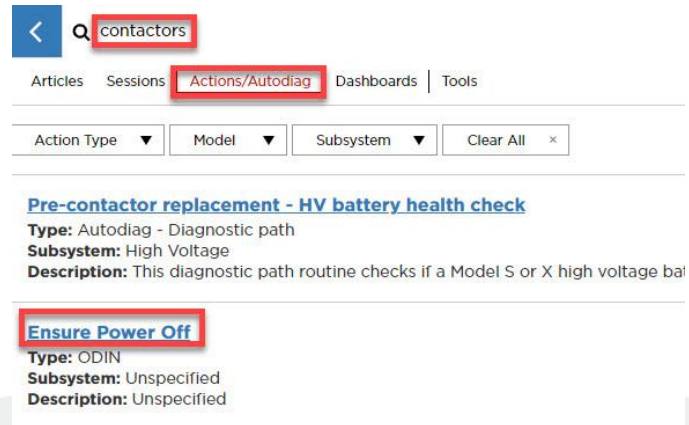


Figure 1

7. Click **RUN** (Figure 2).

! CAUTION: After the contactors open, steps 8, 9,10, and 11 must be completed within 60 seconds.



Figure 2

8. Select the **Actions/Autodiag** tab, type “shunt” into the search field, and click **HVP write shunt ohm** (Figure 3).

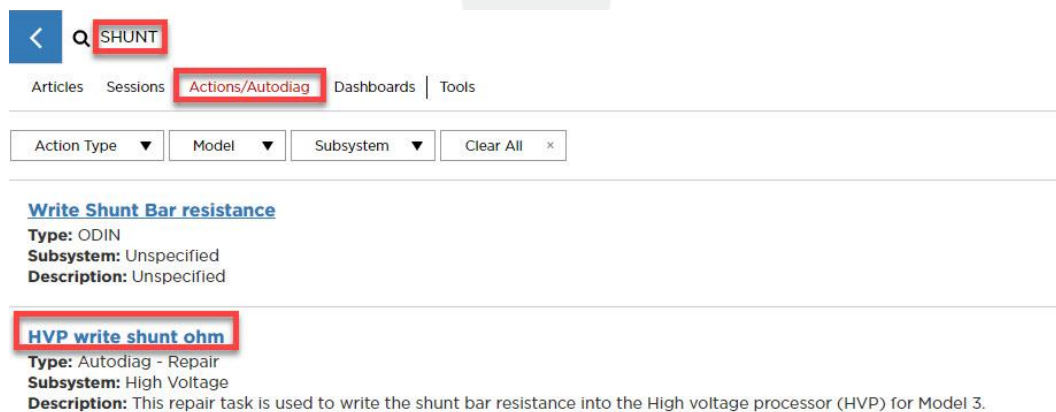


Figure 3

9. Click on the line above “Run Network”, type the entire shunt resistance hex value from step 4, and then click **Run Network** (Figure 4).



Figure 4

10. Select the **prod** environment (Figure 5).

NOTE: It is not necessary to connect the 12V float charger in this situation, because the vehicle will be on 12V auxiliary power for only one minute. The contactors are open, and the HVC low voltage connector is connected.

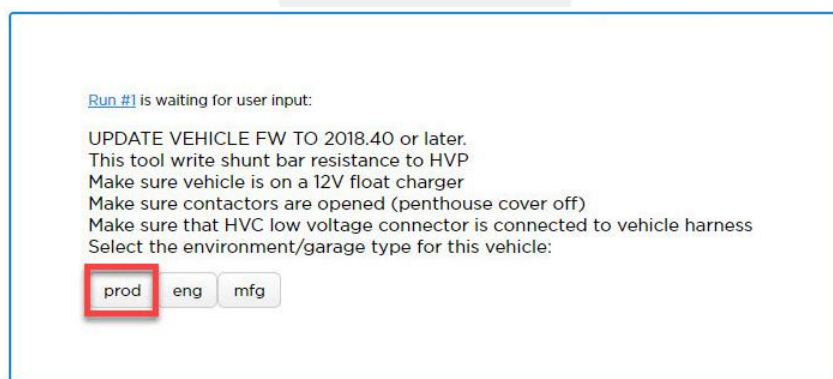


Figure 5

11. Click **RUN** (Figure 6), and wait for the routine to successfully complete.

NOTE: If the routine fails, repeat from step 6.

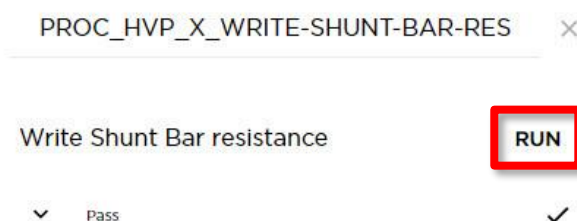


Figure 6

12. Disconnect the laptop from the vehicle.
13. Remove the 2nd row lower seat cushion (refer to Service Manual procedure 13051002).

14. Use a paint pen to write: "Shunt res: <shuntresinhex> hex, <date>" onto the penthouse cover.

Where:

- <shuntresinhex> is the entire value from step 4.
- <date> is the date.

For example, "Shunt res: 00005F85 hex, 02/21/2020"

15. Install the 2nd row lower seat cushion (refer to Service Manual procedure 13051002).

