

Model: All

Vehicle System: 16 – HV Battery System

Region: North America,
Asia Pacific

Tech Note: High Voltage Battery Return Tag

Tech Notes are announcements that help to communicate and track new information about Tesla Service concerns. Such concerns may or may 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 for repairs attempted by unqualified individuals.

This Service Document supersedes TN-13-16-006 R4, dated June 2, 2020. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

⚠ WARNING: Only technicians who have been trained in High Voltage Awareness are permitted to perform this procedure. Proper personal protective equipment (PPE) and insulating HV gloves with a minimum rating of class 0 (1000V) must be worn any time a high voltage cable is handled. Refer to service bulletin [TN-15-92-003](#), High Voltage Awareness Care Points for additional safety information.

NOTE: This form is only intended for undamaged HV Batteries. If the HV Battery has low isolation, the vehicle was involved in an accident, or there is any evidence of water ingress or damage to the HV Battery, do not use this form. Use [TN-14-16-002](#), "High Voltage Battery Evaluation Form, Comprehensive" instead.

Instructions:

1. Print this form and fill it out completely.
2. Scan the completed form and email it to HVBatteryReturn@tesla.com.
3. Include this form with the other shipping documentation for the high voltage battery pack.

Technician Name: _____

To (Service Center/Location): _____

From (Service Center/Location): _____

Removed from VIN: _____

MRB Number: _____

Part Number: _____ Serial Number: _____

Battery to be Shipped: Model S or Model X
 Model 3 or Model Y
 Roadster

Method of Shipment: Ground or Sea
 Air

Battery State: For Model S, Model X, Model 3, and Model Y, use the **Panels > Battery > Battery Shipping** tool in Toolbox 2 to find the following information. For Roadster, refer to the Roadster tool and the appendix of this document. If the state of charge (SOC) cannot be obtained, contact HVBatteryReturn@tesla.com.

Model S, Model X, Model 3, and Model Y

Ok to Ship By Land: Green Red
 Ok to Ship By Air: Green Red
 Maximum Cell State of Charge (SOC): _____
 Minimum Calculated Amp-Hour
 Capacity (min CAC): _____

Roadster

Ok to Ship By Land: True False
 Ok to Ship By Air: True False
 Maximum Cell State of Charge (SOC): _____
 ESS Average Calculated Amp-Hour
 Capacity (ess_average_CAC): _____

Signatures (Both required):

Manager: _____

Technician: _____

Date: _____

Shipping Conditions:

- Make sure to install the HV Rapid Mate safety cover (Tesla PN 1016196-00-A) or B+/B- cable lug covers (Tesla PNs 6004129 and 6004130).
- For Roadster, make sure to remove the Service Disconnect and cover the opening with the Service Disconnect Transport Label (Tesla PN 02-003519-00, refer to [MEM-08-014](#)).
- If shipping to or from Canada, make sure to include [TN-13-16-005](#), "Transport Canada Equivalency Certificate SU 10607 (Ren. 2)" with the shipping documentation.

Appendix:

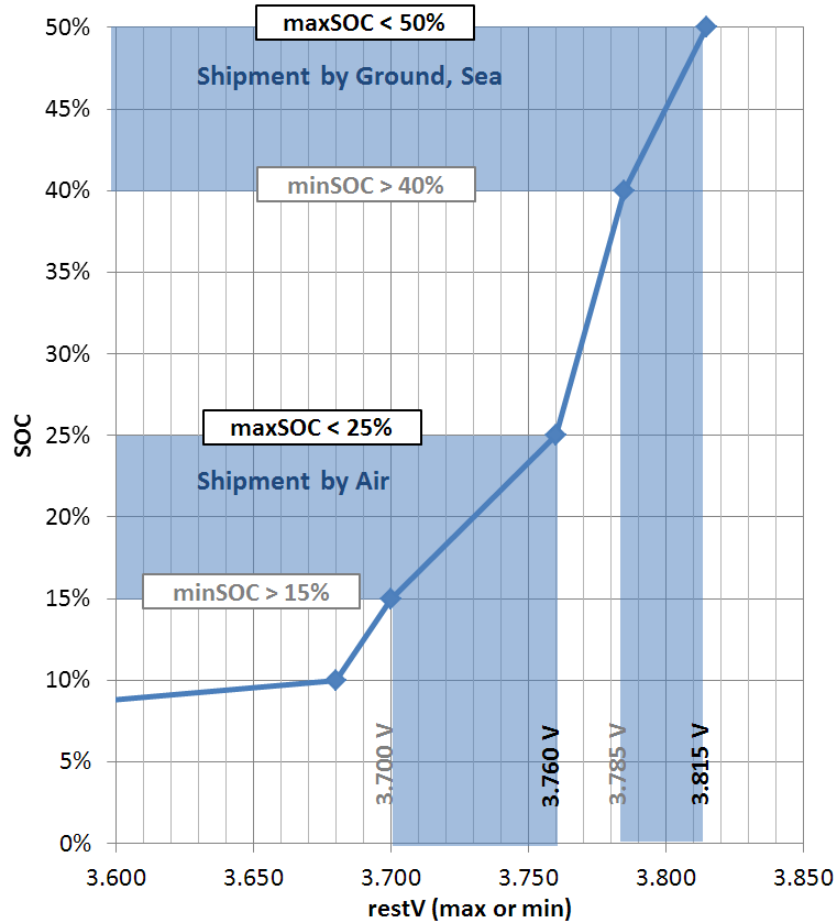
Roadster Resting Voltage or SOC OK to Ship

Resting Max Voltage	Max SOC	Ok to Ship by Ground?	Ok to Ship by Air?
4.200 V	100%	False	False
3.815 V	50%	True	False
3.785 V	40%	True	False
3.760 V	25%	True	True
3.700 V	15%	True	True
3.680 V	10%	True	True
3.000 V	0%	True	True

Roadster Resting Voltage to SOC Conversion

Requirements (Black) and Recommendations (Gray)

Shipping Method	Recommendation	Requirement
Ground, Sea	minSOC > 40%	maxSOC < 50%
Air	minSOC > 15%	maxSOC < 25%



For feedback on the accuracy of this document, email ServiceBulletinFeedback@tesla.com.