Tesla, Inc. Service Bulletin		*Retrofit Hydraulic Control Unit Wake-Up Wire, Model 3 (Lead-Acid Battery)*		
SB-22-33-002 April 30, 2022				
Classification		**Section/Group**	**Mobile Service**	**Configuration**
Repair Bulletin		33 - Brakes	Can Perform (where permitted)	Lead Acid Battery
Model Year	**Model**	**Country/Region**	**Build Location**	
2017 - 2020	Model 3	All	Fremont, Giga Shanghai	
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.				

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 3 vehicles were built without a hydraulic control unit (HCU) wake-up wire, and in rare circumstances, braking and stability control related alerts may appear on the instrument cluster and touchscreen during the vehicle power-on process. Such faults can typically be corrected and the affected functionality restored with a vehicle power cycle.

Correction

Upon customer complaint of braking and stability control alerts that clear after a vehicle power cycle, retrofit an HCU wake-up wire.

Correction Description	Correction	Time
SB-22-33-002 Not Applicable	S012233002	0.0
Retrofit HCU Wake-Up Wire, Model 3 (Lead-Acid Battery)	S022233002	0.4

	Part Number	Description	Quantity
Parts Required	1742989-00-A	ASY,HARN,ESP WAKE,JUMPER,M3Y	1
	1061177-00-B	WIRE HARNESS REPAIR KIT	As Needed
	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	1025812-00-A	Pin Drag Kit	
	1060908-00-A	Soldering Iron and Heat Tool Kit	
	1451046-00-A	Crimp Tool	
	1451045-00-A	Wire cutting and stripping pliers	
Shop Supplies	Electrical tape		

Procedure

1. Remove the underhood storage unit (refer to Service Manual procedure 15240702).
2. Disconnect 12V power (refer to Service Manual procedure 17010200).
3. Loosen the forward RH shock tower brace bolt (Figure 1).

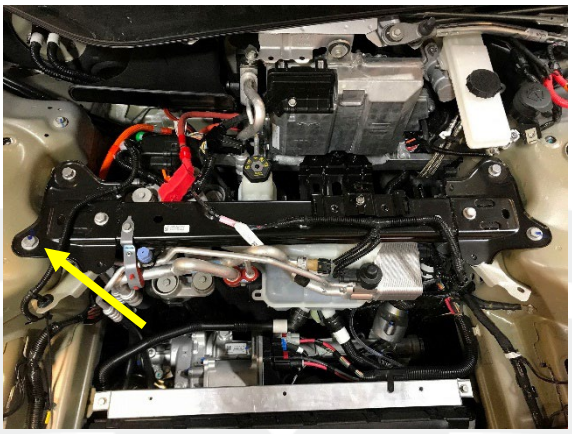

Figure 1

4. Remove the remaining shock tower brace bolts (x5) (Figure 2), and shift the shock tower brace forward on the LH side.

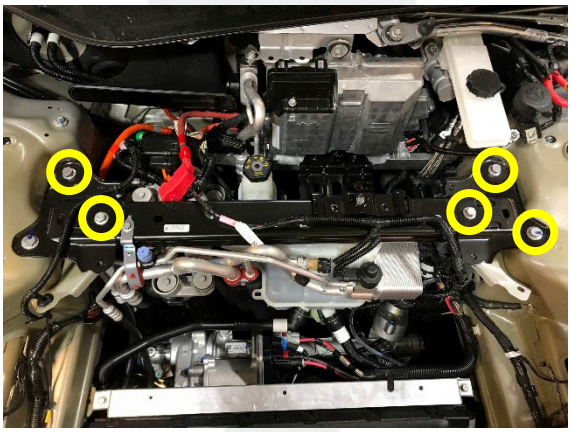

Figure 2

5. Slide the red locking tab, raise the lever (Figure 3), and then remove connector X151 from the HCU (Figure 4).

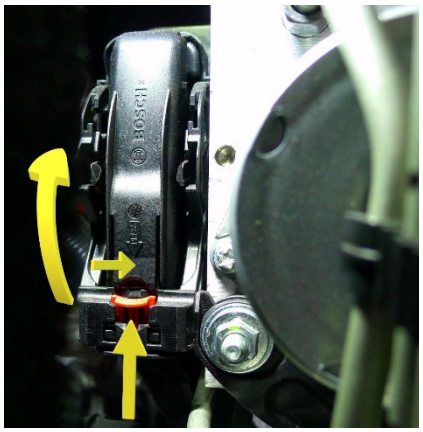

Figure 3

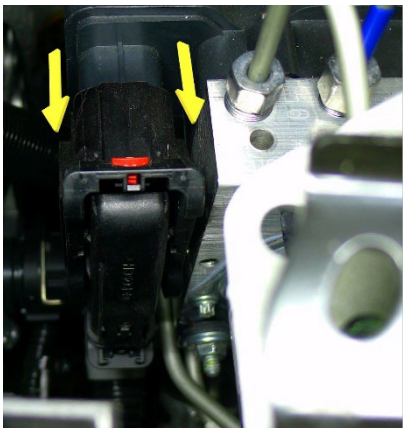

Figure 4

6. If necessary, remove cable ties or cut tape to move connector X151 to a comfortable working position.

7. Remove the cable tie from the rear of connector X151 (Figure 5).

Figure 5

8. Release the tabs (x2) that attach the rear cover to connector X151 (Figure 6), swing the rear cover out (Figure 7), and then remove the rear cover from the connector.

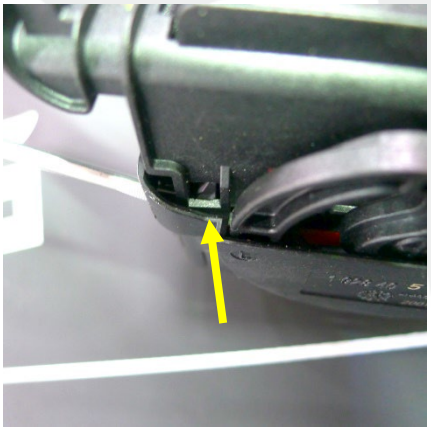

Figure 6

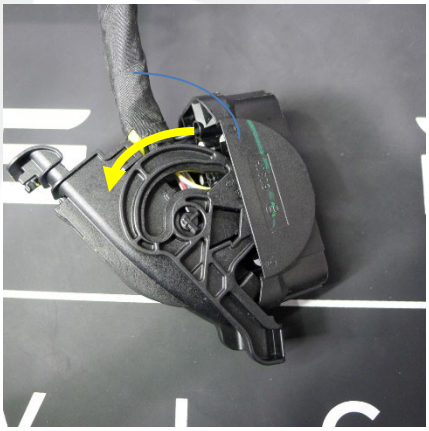

Figure 7

9. Unwrap and remove the electrical tape from the electrical harness for a distance of 150 mm from connector X151 (Figure 8).

Figure 8

10. Use a pick to slide the large locking tab of connector X151 from “CLOSE” to “OPEN” (Figure 9).

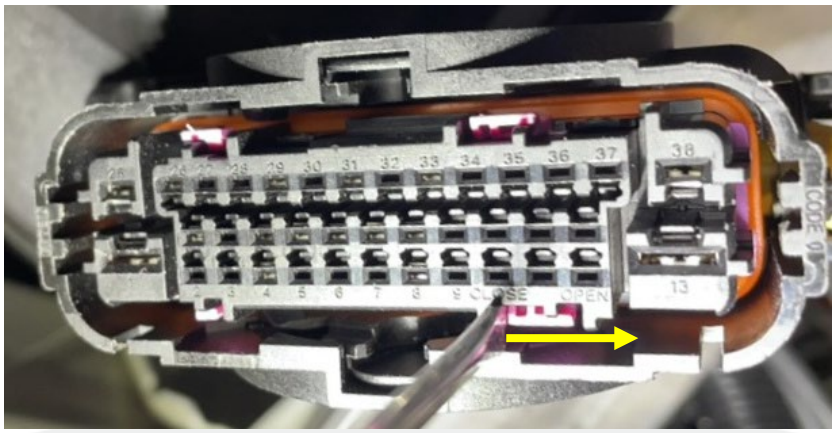

Figure 9

11. Use a pick to remove the plug from receptacle 28 of connector X151 (Figure 10).

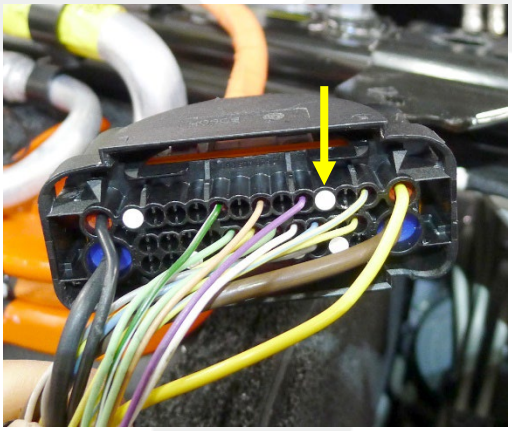

Figure 10

12. Use the tool from the pin drag kit to release the lock for terminal 25 of connector X151 (Figure 11), and at the same time, remove the yellow wire from receptacle 25 (Figure 12).

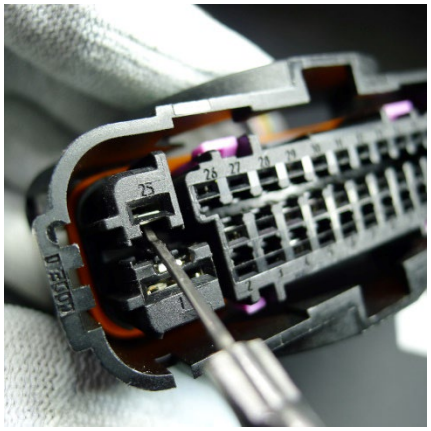

Figure 11

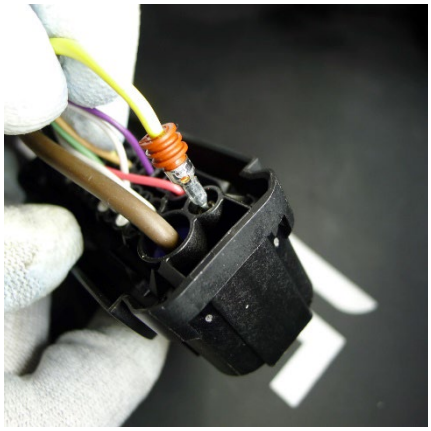

Figure 12

13. Cut the yellow power terminal wire 100 mm from the end (Figure 13), and then discard the end.

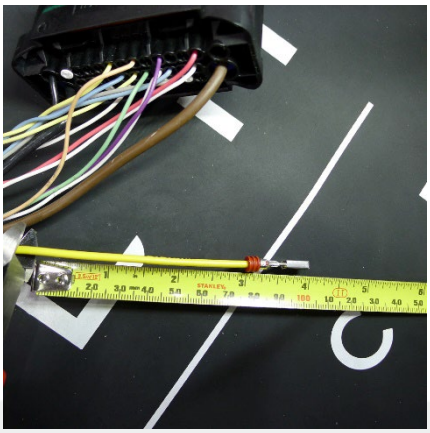

Figure 13

14. Slide the shrink tubing over both wires of the jumper, to the middle of the jumper (Figure 14).

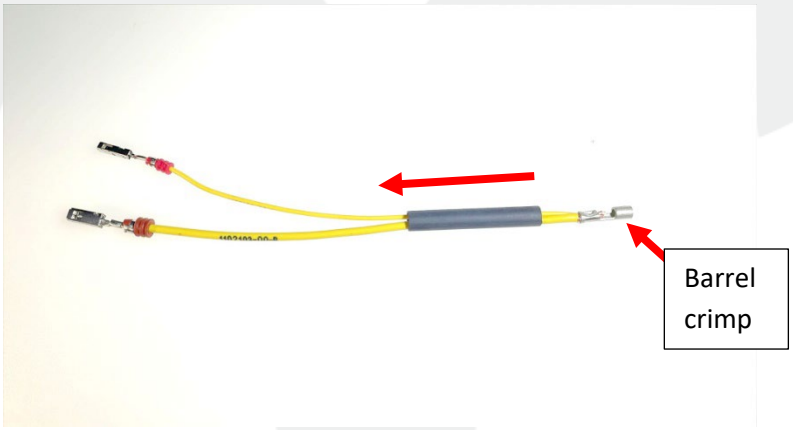

Figure 14

15. Make a butt splice repair to attach the yellow power terminal wire to the barrel crimp of the jumper (Figures 15, 16, and 17).

NOTE: Refer to SI-17-17-002,'Electrical Harness Repair' for instructions how to make this repair.

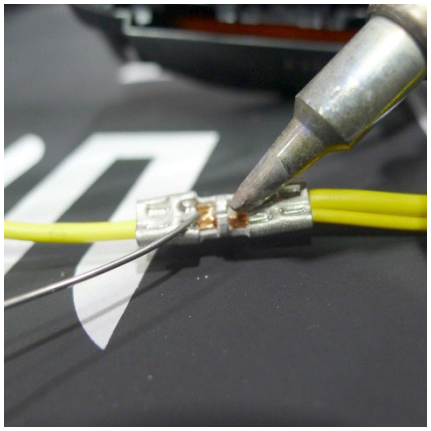

Figure 15 – Crimp wire and solder barrel crimp

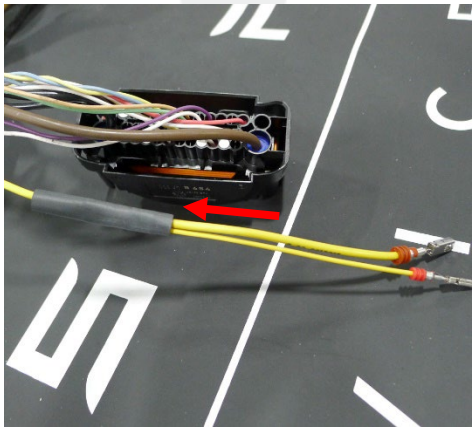

Figure 16 – Slide shrink tubing over barrel crimp and heat

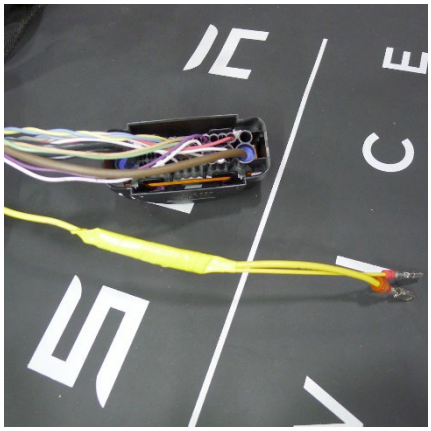

Figure 17 – Wrap with yellow tape to complete

16. Insert the smaller terminal of the jumper into receptacle 28 (Figure 18) and the larger terminal of the jumper into receptacle 25 (Figure 19).

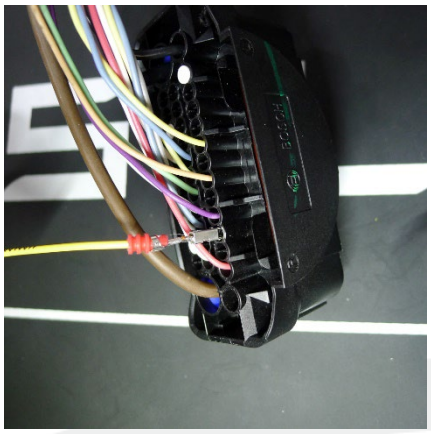

Figure 18

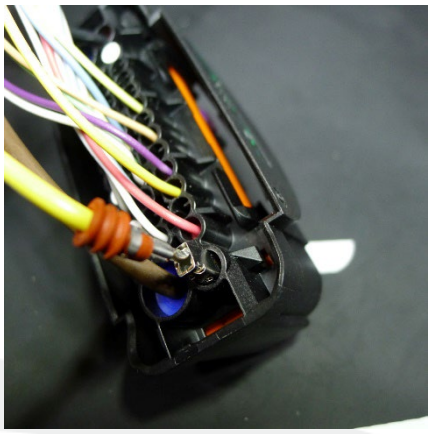

Figure 19

17. Perform a Push-Pull-Push check on each wire to make sure the wires are secure in the connector (Figure 20).

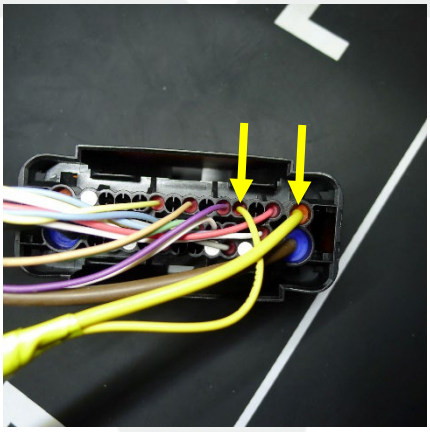

Figure 20

18. Use a pick to slide the large locking tab of connector X151 from “OPEN” to “CLOSE” (Figure 21).

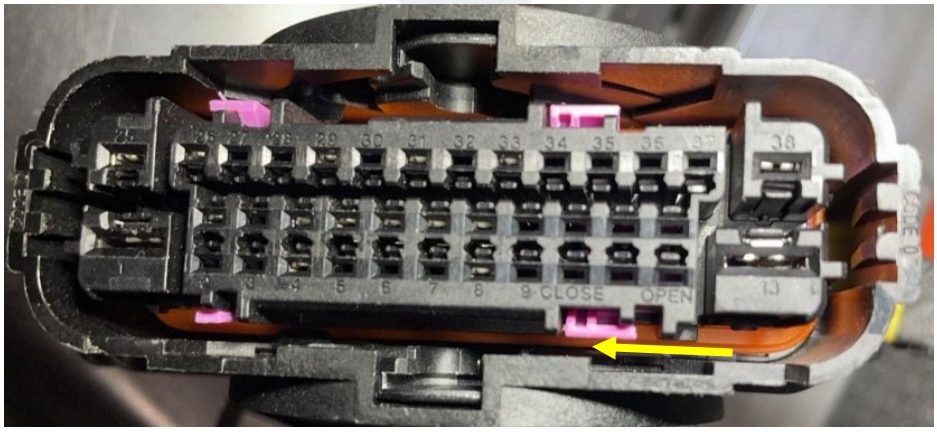

Figure 21

19. Bundle the excess jumper wire neatly into the electrical harness with yellow tape (Figure 22), and then wrap the harness with anti-abrasion tape (Figure 23).

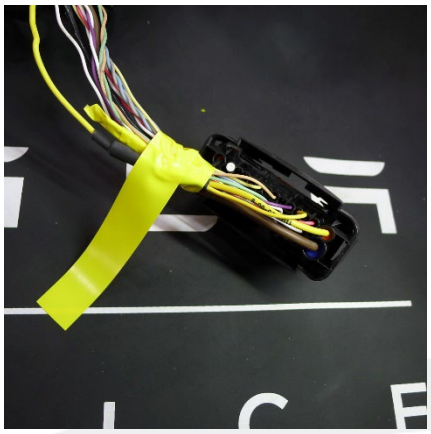

Figure 22

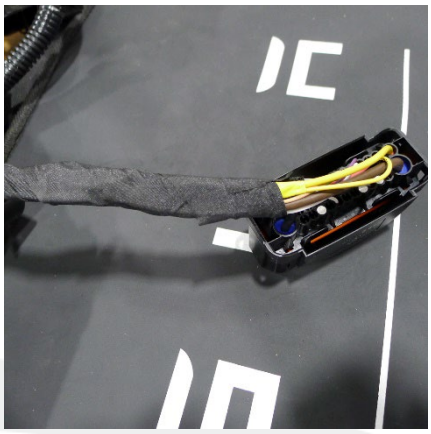

Figure 23

20. Attach the rear cover to connector X151, and then swing the rear cover close (Figure 24), engaging the tabs (x2) (Figure 25).

Figure 24

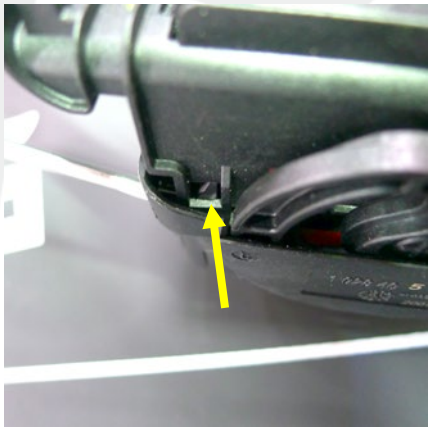

Figure 25

21. Fasten a small cable tie to the rear of connector X151 to secure the rear cover (Figure 26), and then trim the tie.

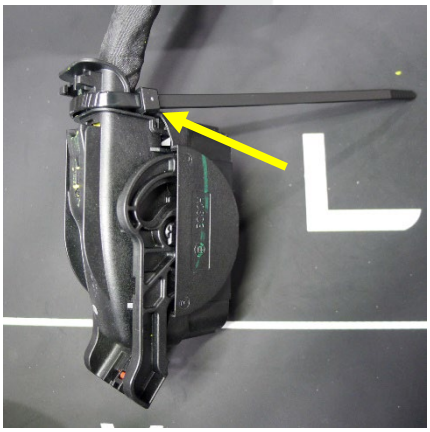

Figure 26

22. Attach connector X151 to the HCU (Figure 27), lower the lever, and then slide the red locking tab (Figure 28).

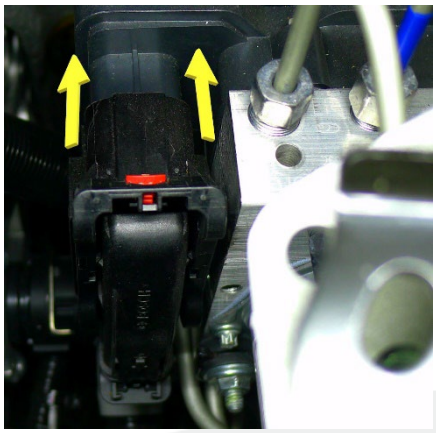

Figure 27

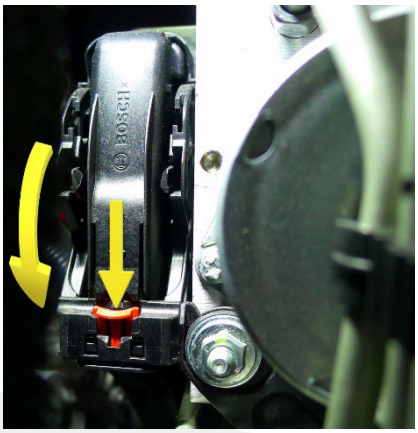

Figure 28

23. Return the shock tower brace back to position, install all bolts, and then tighten the forward bolts (x2) as shown (Figure 29) (torque 62 Nm).

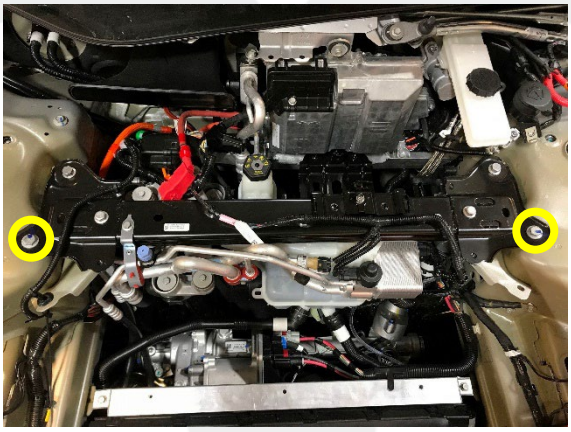

Figure 29

24. Tighten the remaining bolts (x4) as shown (Figure 30) (torque 67 Nm).

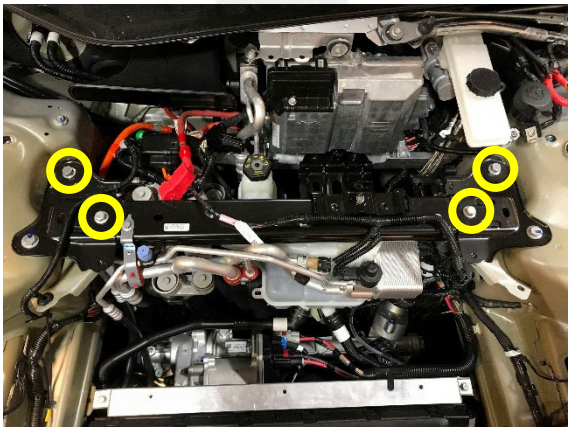

Figure 30

25. Connect 12V power (refer to Service Manual procedure 17010200).

26. Install the underhood storage unit (refer to Service Manual procedure 15240702).