



Retrofit Premium Headlights

Classification	Repair Bulletin	Section/Group	17 - Electrical	Country/Region	All
Year	2017	Model	Model S Model X	Version	All

Bulletin Classification: *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 range listed. 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 repairs attempted by unqualified individuals.*

Condition

Certain Model S and Model X vehicles were incorrectly manufactured with base headlights instead of premium headlights. While the current headlights are adequate, they are not what should have been installed.

Correction

Retrofit LH and RH premium headlights and update the vehicle configuration.

Correction Description	Correction	Time
SB-18-17-008 Not Applicable	S011817008	0.0
Retrofit Model S (NA) LH and RH Premium Headlights (North America)	S021817008	0.8
Retrofit Model S (EU/APAC LHD) LH and RH Premium Headlights	S031817008	1.15
Retrofit Model S (EU/APAC LHD W/LEV) LH and RH Premium Headlights	S041817008	1.15
Retrofit Model S (EU/APAC RHD) LH and RH Premium Headlights	S051817008	1.15
Retrofit Model S (EU/APAC RHD W/LEV) LH and RH Premium Headlights	S061817008	1.15
Retrofit Model X (NA) LH and RH Premium Headlights	S071817008	0.8
Retrofit Model X (EU/APAC LHD) LH and RH Premium Headlights	S081817008	1.15
Retrofit Model X (EU/APAC RHD) LH and RH Premium Headlights	S091817008	1.15

Required Part(s):	Part Number	Description	Quantity
Model S (NA)	1053570-00-D	HD/LP ASY, SAE UP-LEVEL, LH	1
	1053571-00-D	HD/LP ASY, SAE UP-LEVEL, RH	1
Model S (EU/APAC LHD)	1053574-00-C	HD/LP ASY, ECE LHD UP-LEVEL, LH	1
	1053575-00-C	HD/LP ASY, ECE LHD UP-LEVEL, RH	1
Model S (EU/APAC LHD W/LEV)	1065045-00-C	HD/LP ASY, ECE LHD UP-LEVEL W/LEV, LH	1
	1065046-00-C	HD/LP ASY, ECE LHD UP-LEVEL W/LEV, RH	1
Model S (EU/APAC RHD)	1053578-00-C	HD/LP ASY, ECE RHD UP-LEVEL, LH	1
	1053579-00-C	HD/LP ASY, ECE RHD UP-LEVEL, RH	1
Model S (EU/APAC RHD W/LEV)	1065047-00-C	HD/LP ASY, ECE RHD UP-LEVEL W/LEV, LH	1
	1065048-00-C	HD/LP ASY, ECE RHD UP-LEVEL W/LEV, RH	1
Model X (NA)	1034314-00-C	HD/LP ASY, SAE UP-LEVEL, LH	1
	1034315-00-C	HD/LP ASY, SAE UP-LEVEL, RH	1
Model X (EU/APAC LHD)	1034318-00-C	HD/LP ASY, ECE LHD UP-LEVEL, LH	1
	1034319-00-C	HD/LP ASY, ECE LHD UP-LEVEL, RH	1
Model X (EU/APAC RHD)	1034322-00-C	HD/LP ASY, ECE RHD UP-LEVEL, LH	1
	1034323-00-C	HD/LP ASY, ECE RHD UP-LEVEL, RH	1

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

Procedure

1. Inspect the headlights.
 - If the headlights are not base level (if the headlights are premium), discontinue this procedure.
 - Base level headlights (Figure 1) have a single lens along the upper-central edge of the headlight assembly.



Figure 1 (Base level headlights)

- Premium level headlights (Figure 2) have three reflectors for the turning lights along the upper-central edge of the headlight assembly.

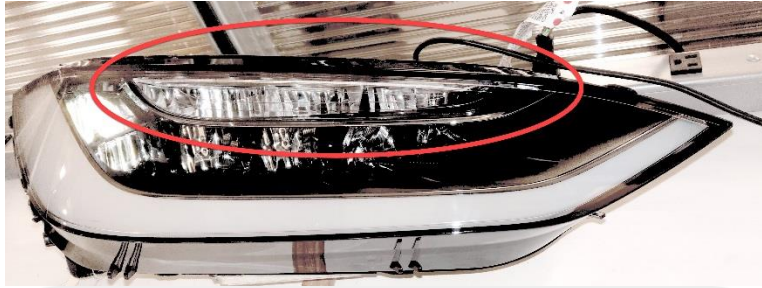


Figure 2 (Premium level headlights)

- If the headlights are base model, continue this procedure.
2. Remove the front fascia (Model S vehicles refer to Service Manual procedure 10010901, and Model X vehicles refer to Service Manual procedure 10011001).
 3. Remove the base level headlights (refer to Service Manual procedure 17400102, but do not replace the front fascia until instructed to do so).

NOTE: Keep the base headlights in a safe location.

4. Retrofit the premium level LH and RH headlights (refer to Service Manual procedure 17400102, but do not replace the front fascia until instructed to do so).
5. Update the vehicle configuration:
 - a. Connect a laptop with Toolbox to the vehicle.
 - b. Open Toolbox.
 - c. Click the VIN.
 - d. Type **curve lighting** in the search box, and then press **Enter**.

NOTE: A drop-down list is displayed, showing the current curve lighting configuration.
 - e. Change the curve lighting configuration by selecting “**varroc**” from the drop-down list.
 - f. Click **Save** to update the vehicle configuration.
 - g. Wait for the gateway to reset.
6. Model S vehicles only: Reset the body controllers and update the Pektron controller settings (for Model X vehicles, go to step 7):
 - a. Start Toolbox.

b. From the **Panels** menu, select **Gateway and Center Display > Resets** (Figure 3).

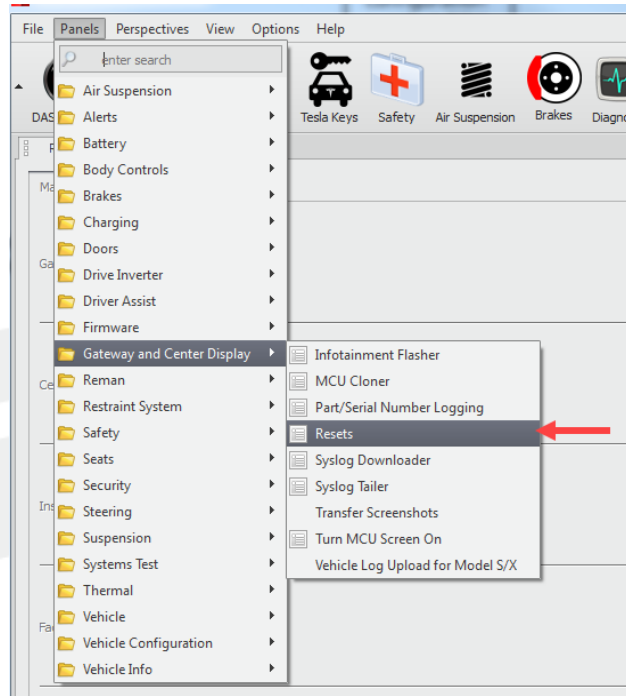


Figure 3 (Select the Resets page)

c. Select the **ECU Resets** tab (Figure 4).

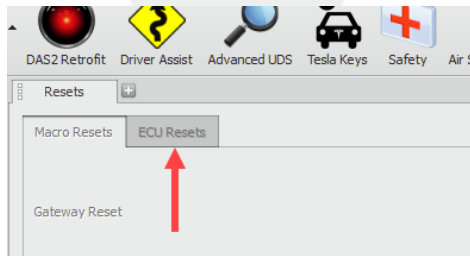


Figure 4 (Select the ECU Resets tab)

d. In the **Body Controls** list, select all Pektron controllers displayed in the **Body Controls** list.

- Body Controller (BDY)
- Drivers Door Controller (DDM)
- Lift gate controller (LFT) (only if equipped with power lift gate)
- Passenger Door Controller (PDM)
- Security Controller (SEC)
- Sunroof Controller (SUN) (only if equipped with a sunroof)

NOTE: All Pektron controllers shown in the **Body Controls** list should be selected. Depending on vehicle configuration, the list of controllers for a particular vehicle might be different than those in the image above.

e. Click **Reset** (Figure 5).

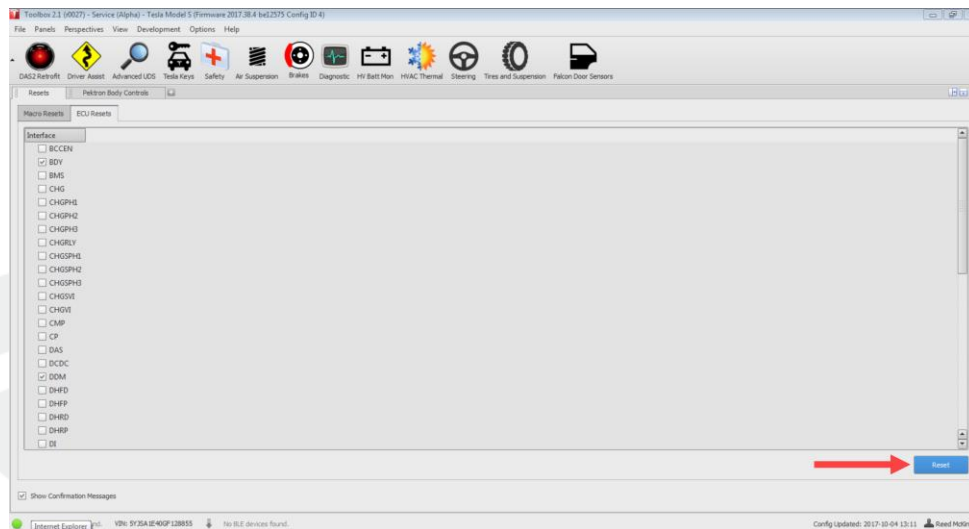


Figure 5 (Reset the selected controllers)

f. From the Panels menu, select Body Controls > Pektron Body Control configuration.

g. Select BDY and all other equipped Pektron control units in the vehicle.

h. Click **Play**.

i. Check the results of the configuration sequence:

- If the configuration process results indicate a success, click **Finish** (Figure 6).
- If the configuration process results indicate a failure, reset all the Pektron control units in the vehicle and repeat steps f through i.

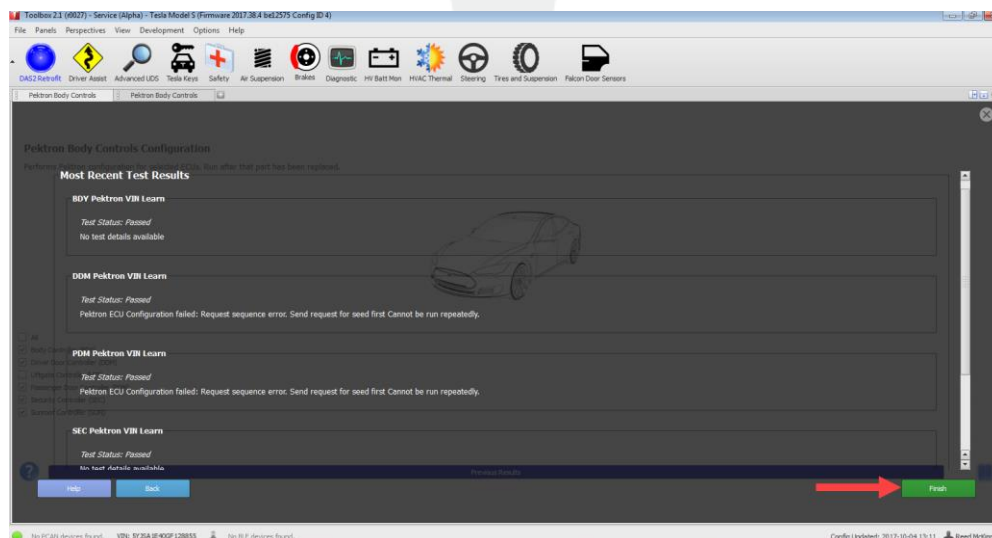


Figure 6 (Finish resetting the selected controllers)

- j. Open and close the doors to allow the vehicle gateway to reboot.
7. Update the vehicle firmware.
8. Disconnect the laptop from the vehicle.
9. Test the headlights:
 - a. Make sure that adaptive headlights are enabled (**Controls > Settings > Vehicle > Adaptive Headlights > ON**).
 - b. Press and hold the brake pedal.
 - c. Put the vehicle in **Drive**.
 - d. Turn on the headlights.
 - e. Have an assistant watch the headlights and turning lights.
 - f. Turn the steering wheel as far to the right as possible.

NOTE: As the steering wheel is turned, the first turning light should illuminate. As the steering wheel is turned further, the second and third turning lights should illuminate in sequence, until all 3 turning lights are illuminated.
 - g. Return the steering wheel to the center position.
 - h. Turn the steering wheel as far to the left as possible.

NOTE: As the steering wheel is turned, the first turning light should illuminate. As the steering wheel is turned further, the second and third turning lights should illuminate in sequence, until all 3 turning lights are illuminated.
 - i. Return the steering wheel to the center position.
 - j. Use the turn signal to indicate a right turn.

NOTE: The RH turning lights should illuminate.
 - k. Use the turn signal to indicate a left turn.

NOTE: The LH turning lights should illuminate.
 - l. For Model S vehicles only, if any test in step 9 fails, repeat steps 6 through 9.

NOTE: If, after the 2nd repetition of steps 6 through 9, the turning lights do not function correctly, start and escalate a Toolbox session.
10. Install the storage cubby under the touchscreen.
11. Align the headlights:
 - Model S or Model X, US (refer to Service Manual procedure 17409000).
 - Model S, Europe (refer to Service Manual procedure 17409100).

12. Install the front fascia (Model S vehicles refer to Service Manual procedure 10010901, and Model X vehicles refer to Service Manual procedure 10011001).
13. Return the removed headlights through the MRB process.

Affected VIN(s) Affected Model S and Model X vehicles ordered between approximately July 21 and October 1, 2017.

NOTE: This is a simplified summary 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.

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