

Headlights - Adjust - Global (Wall Method)



Correction code 17400160
FRT 0.10

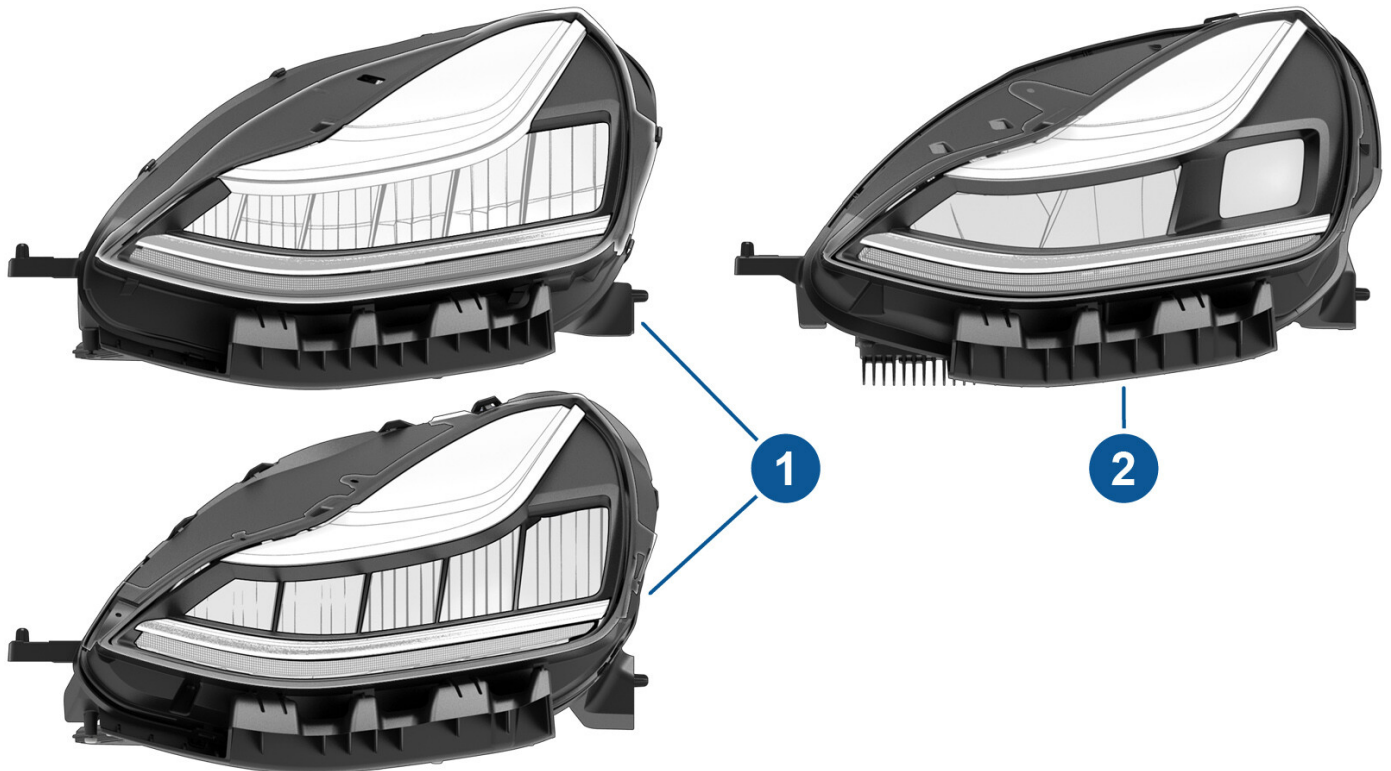
NOTE: Unless otherwise explicitly stated in the procedure, the above correction code and FRT reflect all of the work required to perform this procedure, including the linked procedures. **Do not stack correction codes unless explicitly told to do so.**

NOTE: See [Flat Rate Times](#) to learn more about FRTs and how they are created. To provide feedback on FRT values, email LaborTimeFeedback@tesla.com.

NOTE: See [Personal Protection](#) to make sure wearing proper PPE when performing the below procedure.

Identify Headlight Type

This procedure is applicable only to the "Global" style headlight. The global headlight (2) has a different reflector and lens design compared to the SAE/ECE headlight (1). The differences are illustrated below.



Inclination angle in Adjustment Mode versus under normal driving conditions

Note that in adjustment mode, the global headlights are adjusted to a 0% inclination. This means that in adjustment mode, the headlight beam projects on the wall at the same height as the height of the center of the headlight (28 in (71 cm)).

Under normal driving conditions (i.e. when the vehicle is not in adjustment mode), the headlights automatically level to a region specific vertical (downward) and horizontal (left/right depending on the vehicle being RHD/LHD) angle. This means that when you check the headlight adjustment while **not** in adjustment mode, the headlight beam will project lower than the tape marks on the wall.

For example: for Europe, the headlight beam vertical inclination angle is -1%. This means that, with the vehicle at a distance of 25 ft (7.62 m) from the wall, the beam will project 3 inch (7.62 cm) under the tape mark on the wall.

Adjust Headlights Using a Wall

1. Enter headlight adjustment mode:

1. On the vehicle touchscreen, touch **Controls > Service > Adjust Headlights**.
2. If prompted to calibrate the headlights (Figure A), continue to substep c. If prompted to adjust the headlights (Figure B), skip to step 2.

Figure 1. Figure A

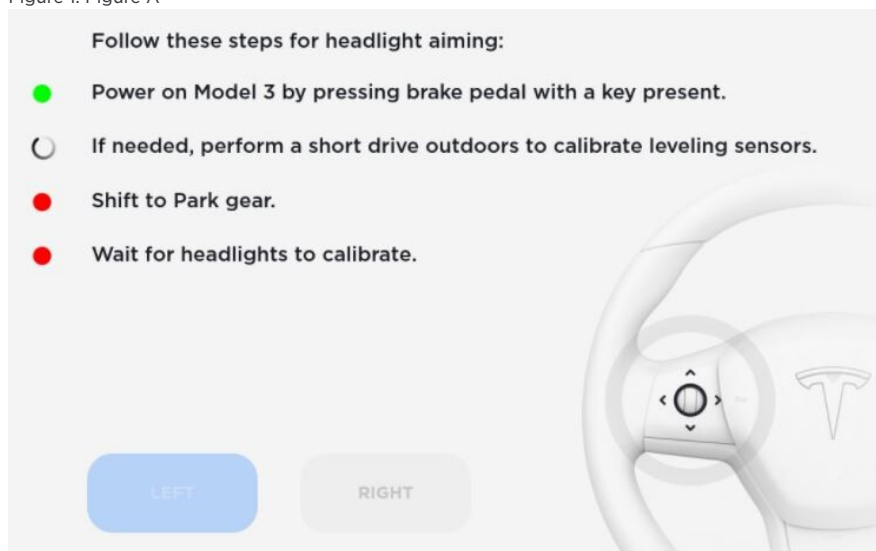
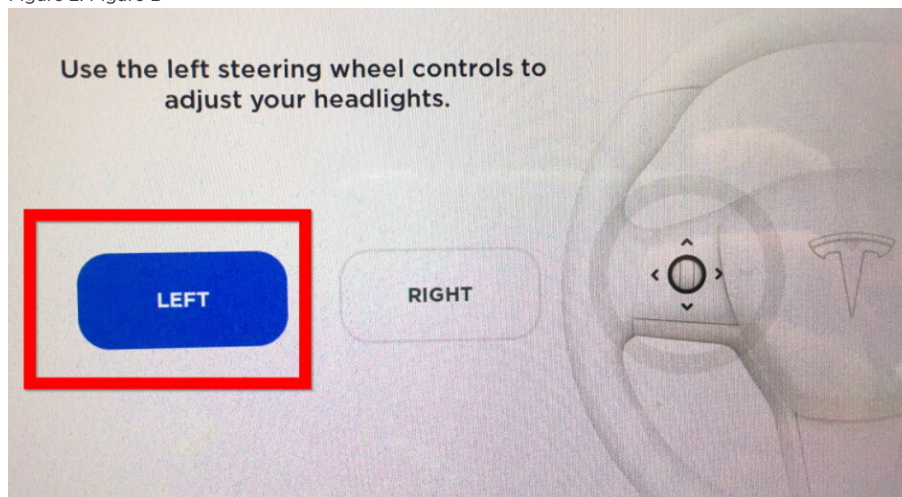


Figure 2. Figure B



3. Follow the prompts on the touchscreen to calibrate the headlights. Calibration is complete when all 4 checks have transitioned from "red" to "green".

Note

The calibration drive can take up to 2 km.

Note

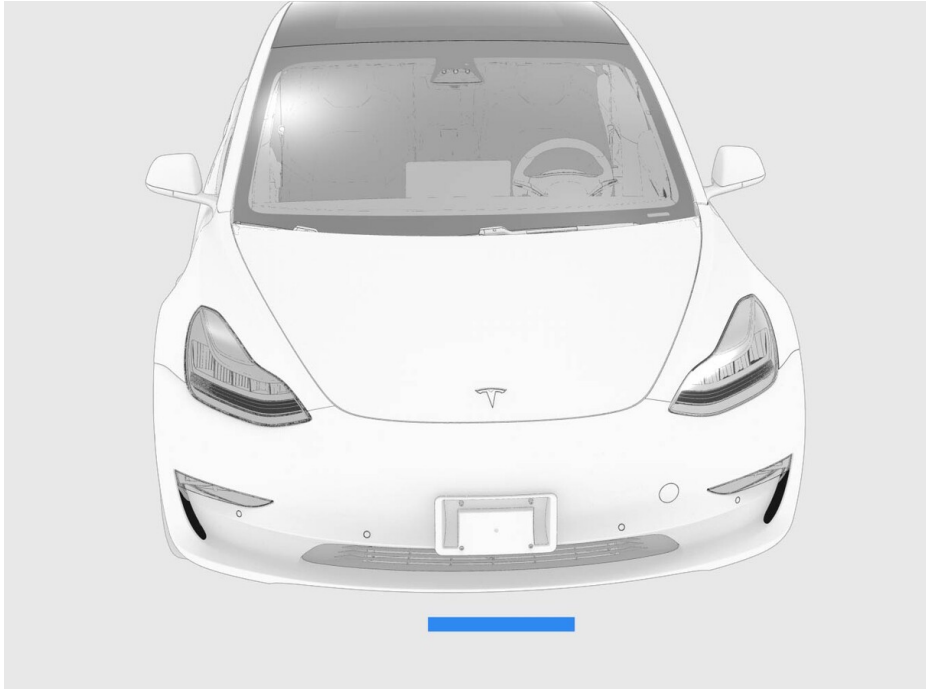
To ensure an accurate calibration:

- After turning on the drive rails, wait for at least 1 second before switching to **Drive**.
- Close all vehicle doors and do not open the doors while performing the calibration drive.
- After stopping the vehicle, wait at least 1 second before opening the doors.
- Do not drive the vehicle in reverse for more than 10 meters. If this is unavoidable due to garage logistics, start the headlight calibration after the vehicle has exited the garage.

4. After headlight calibration is complete, the headlights can be adjusted. Continue to the next step.

2. Position the vehicle for adjusting the headlights. The vehicle should be:
 - Located in a darker work area with low ambient lighting.
 - Parked on a level surface.
 - Perpendicular to a wall that has a matte surface. The wall must be at least 1.8 m (6 ft) high and 3.7 m (12 ft) wide.
3. Make sure that all 4 tires are inflated to specification.
4. Put a piece of tape on the wall 28 in (71 cm) from the ground.
5. Measure 25 ft (7.62 m) away from the wall and put a piece of tape on the ground to indicate where the vehicle should be parked.
6. Park the vehicle perpendicular to the wall so that the front fascia is flush with the tape that was placed on the ground in the previous step.

Figure 3. Model 3 shown, Model Y similar




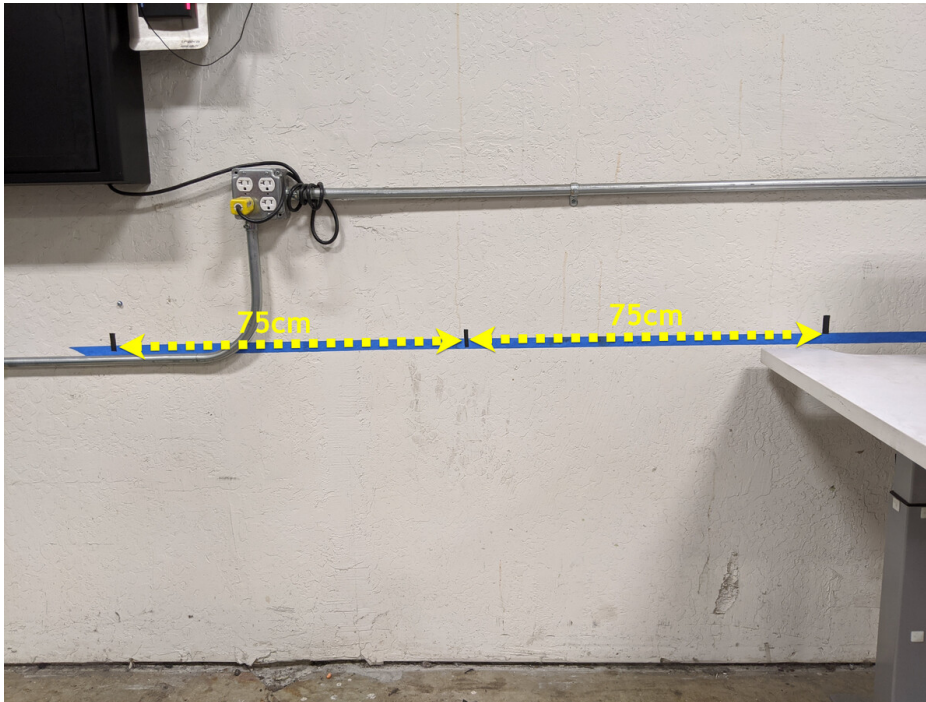
7. Confirm that the vehicle is perpendicular to the wall by measuring the distance from the center of each front wheel to the wall. If necessary, reposition the vehicle until the distance between each front wheel to the wall is equal.
 8. Holding a laser pointer against the tape on the wall, project a laser beam onto the center point of the vehicle. When the laser beam is aligned with the center of the vehicle, mark the wall at the laser pointer with a piece of tape, adjacent to the tape applied during step 4. . This is the center reference point.
- Tip: Aim the laser beam at the flat part of the front fascia cover, directly below the bottom tip of the Tesla "T" badge.

Figure 4. Model 3 shown, Model Y similar



9. Put tape on the wall 29.5 in (75 cm) to the left and to the right of the center reference point. These are the left and right reference points.



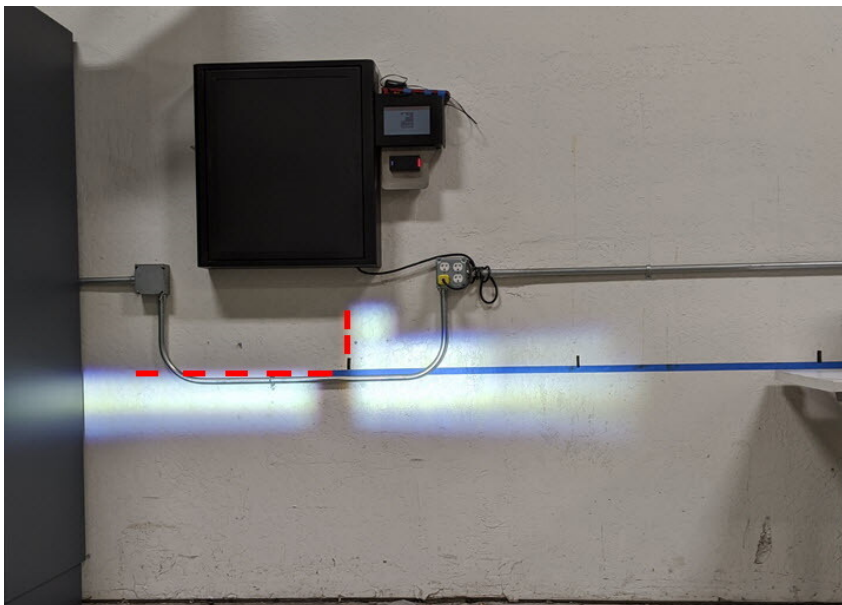
10. If not already activated, enter headlight adjustment mode. On the vehicle touchscreen, touch **Controls** > **Service** > **Adjust Headlamps** to enable Headlight Adjustment Mode.
11. Cover the RH headlight with a clean shop towel; make sure that all light from the right headlight is blocked.
12. On the vehicle touchscreen, select **Left**, then use the left scroll wheel on the steering wheel to adjust the beam level.

Note

The top of the rectangular beam aligns with the horizontal tape mark on the wall, and the left edge of the L-shaped beam aligns with left reference point.

CAUTION

Do not sit in the vehicle, as this will affect headlight alignment.



13. Remove the cover from the RH headlight.
14. Repeat steps 10 through 12, covering the LH headlight and adjusting the RH headlight.
15. Exit the headlight adjustment mode on the center display.