Body Repair Tech Note: Repair Guidelines for Front Bumper Fascias

Body Repair Tech Notes provide information about Tesla-approved methods and practices for body repair. 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 Body Repair Tech Note supersedes BR-17-10-004 R1, dated 16-Jun-17. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Model S vehicles built after April 10, 2016, all Model X vehicles, and all Model 3 vehicles have a radar sensor located behind the front bumper fascia. To prevent interference with the radar sensor, use the requirements below when repairing the front bumper fascia on these vehicles.

The maximum paint thickness in the radar area (Figures 1, 2, and 3) on a front bumper fascia is 300 microns (12 mils). 300 microns (12 mils) is approximately 1 factory coat and 1 recoat.

Use 1 of the 2 methods below to determine paint coat thickness:

- Use a measurement tool designed to work with plastic such as PosiTector 200 or Phase II UTG-2900 Ultrasonic Thickness Gauge.
- Sand the component to expose the base plastic, and then count the paint layers to determine if more than 2 full coats have been applied to the front bumper fascia.

If a front bumper fascia requires repainting for a 2nd or 3rd time, all paint must be removed in the radar area (Figures 1, 2, and 3) down to the base plastic before repainting, or the front bumper fascia must be replaced.

Repairing the front bumper fascia outside of the repair area is allowed.

- Do not perform any repairs in the radar area (Figures 1, 2, and 3). Repairs include adding plastic filler, gluing, plastic welding or stapling, or leaving a feathered paint edge.
- Remove all paint in the radar area (Figures 1, 2, and 3) down to the base plastic if refinishing the front bumper fascia will result in a film thickness greater than 300 microns (12 mils) in the radar area.

⚠️ CAUTION: Avoid removing the base plastic material in the radar area. The radar sensor is calibrated to the factory thickness of the plastic. Removing excessive plastic material in this area might result in incorrect radar function.

NOTE: Refer to the paint manufacturer’s recommendations for preparing raw plastic components.
Figure 1 (Model X)

Figure 2 (Model S built after April 10, 2016)

Figure 3 (Model 3)

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