

## Body Repair Tech Note: Repair Plastic Components

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.

Non-safety related plastic components can be repaired using industry standard tools and methods, such as nitrogen welding or two-part adhesive designed for plastic repair.

**NOTE:** Refer to the instructions available from the tool supplier on how to perform a plastic repair.

Identify the plastic material of the component prior to repair. Inspect each component for an abbreviation that identifies the component material (Figure 1).

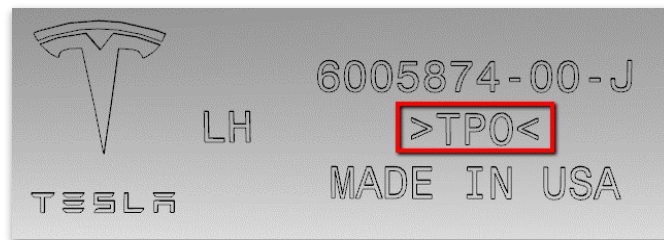
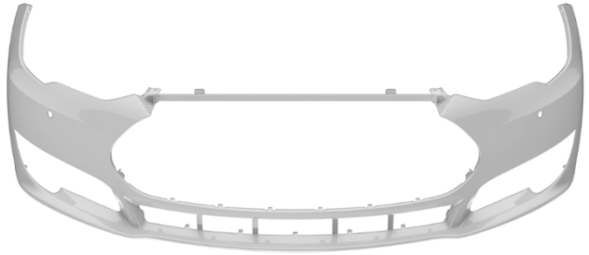






Figure 1 (Example of abbreviation)

Abbreviation	Material Type	Abbreviation	Material Type
ABS	Acrylonitrile Butadiene Styrene	TPE	Thermoplastic Elastomer
PP	Polypropylene	TEO	Thermoplastic Elastomer Olefin
PPO	Rigid Polymer Alloy	PUR	Polyurethane
EPDM	Ethylene Propylene Diene Modified	RIM	Reaction Injection Molded Urethane
TPO	Thermoplastic Olefin	TPUR	Thermoplastic Polyurethane

## Common Repairable Parts

These commonly damaged components can be repaired using industry standard tools and methods.

Description	Material	Image
Front Fascia	Thermoplastic Olefin (TPO)	 <p><b>⚠ CAUTION:</b> Plastic repairs are not allowed in the radar area for Model S built after April 2016 and all Model X. Refer to <a href="#">BR-17-10-004</a>, "Repair Guidelines for Front Bumper Fascias" for more information.</p>
Rear Fascia	Thermoplastic Olefin (TPO)	
Ducting Assembly	Polypropylene with 30% Glass-fiber Filler (PP-GF30)	
Lower Valance	Thermoplastic Olefin (TPO)	
Front Carrier	Polypropylene with 40% Glass-fiber Filler (PP-GF40)	

## Repairing the Front Carrier

The areas highlighted in yellow on the composite front carrier (Figure 2) can be repaired. Do not repair the front carrier if the damage extends beyond the highlighted areas.

**NOTE:** The front carrier on Model S Rear Wheel Drive vehicles built before April 2016 is made of magnesium, not plastic. Do not use these instructions to repair a magnesium front carrier.



**Figure 1 (Front carrier repairable areas)**

For feedback on the accuracy of this document, email [BodyRepair@tesla.com](mailto:BodyRepair@tesla.com).