

## Body Repair Tech Note: Structural Repair Procedures Not Requiring a Frame Bench

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 Motors assumes no liability for injury or property damage due to a failure to properly follow these instructions or for repairs attempted by unqualified individuals.

All structural repairs must be performed with the vehicle properly mounted to an approved frame bench, with the exception of the following procedures:

**NOTE:** For a list of approved frame bench systems, refer to [BR-16-92-006](#), "Approved Frame Bench Systems".

**NOTE:** A frame bench should be used as a holding fixture only. For more information, refer to [BR-14-10-004](#), "Model S and Model X Structural Repairs".

**NOTE:** The only approved method for evaluating structural damage and for performing structural repair is to use a minimum of 8 fixture points on an approved frame bench. More fixture points might be necessary depending on the level of damage. For more information, refer to [BR-14-10-004](#), "Model S and Model X Structural Repairs".

### Model S

- [Body Side Outer \(Lower Section\)](#)
- [Front Frame Rail Cap \(Rear Wheel Drive\)](#)
- [Front Header Assembly](#)

**NOTE:** The front and rear suspension must be unloaded while the Front Header Assembly procedure is performed.

- [Front Shock Tower Reinforcement](#)
- [Quarter Outer Skin \(Complete\)](#)
- [Rear Header Assembly](#)

**NOTE:** The front and rear suspension must be unloaded while the Rear Header Assembly procedure is performed.

- [Rear Trunk Floor Panel Extension](#)
- [Rear Node Reinforcement](#)
- [Rear Trunk Floor Assembly](#)
- [Shotgun Upper Assembly \(Section\)](#)

**NOTE:** The front suspension must be unloaded while the Shotgun Upper Assembly (Section) procedure is performed.

- [Wheel Arch Outer Panel \(Section\)](#)
- [Wheelhouse Extension Panel](#)

## Model X

- [A-Pillar Upper Outer \(Complete\)](#)
- [A-Pillar Upper Outer \(Section\)](#)
- [Body Side Outer \(Lower Section\)](#)
- [B-Pillar Header Upper](#)
- [Rear Node Outer Reinforcement](#)
- [Rear Quarter Outer](#)

**NOTE:** If the lower half of the rear door is removed or if the spine is supported during the repair, the Rear Quarter Outer procedure can be performed without mounting the vehicle to an approved frame bench. Otherwise, the vehicle must be mounted to an approved frame bench.

- [Rear Trunk Floor Panel](#)
- [Rear Trunk Waterfall](#)
- [Rear Wheel Arch \(Complete\)](#)
- [Rear Wheel Arch \(Section\)](#)
- [Rear Trunk Floor Panel Extension](#)
- [Wheelhouse Extension Panel](#)

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