



Body Repair Tech Note: Approved Frame Bench Systems

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-16-92-006 R3, dated 19-Jan-18. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

The following approved frame bench system companies work closely with the Tesla Body Repair Program to design and build fixtures to Tesla's exact specifications. This collaboration not only provides accurate component location, but also ensures safe and proper support of the body structure during the repair process.

NOTE: All structural repairs on Tesla vehicles must be performed with the vehicle properly mounted to an approved frame bench, with the exception of the procedures listed in [BR-16-10-008](#), "Structural Repair Procedures Not Requiring a Frame Bench". The electronic measuring systems listed in the "Optional Electronic Measuring Systems" section of this document can be used for damage analysis, but are not a substitute for component fixturing during structural repair.

Frame Bench Systems

The frame benches and the required accessories listed below are approved for Model S, Model X, and Model 3 structural repairs. Contact the appropriate local frame bench equipment distributor to purchase or rent dedicated Tesla fixtures.

Manufacturer	Frame Bench	Required Bench Accessories
Car Bench	<ul style="list-style-type: none"> Muraena repair benches Manta repair benches 	<ul style="list-style-type: none"> Universal jig system Dedicated mini jigs for Model S, Model X, and Model 3
Car-O-Liner	<ul style="list-style-type: none"> BenchRack alignment bench Quick 42 alignment bench 	<ul style="list-style-type: none"> One of the Car-O-Liner electronic measuring systems listed in the "Optional Electronic Measuring Systems" section of this document EVO 1 basic anchoring system EVO 2 extended anchoring system EVO 3 holding and fixturing system Mounting fixtures for Model S and Model X Pinch weld clamps for Model 3
Celette	<ul style="list-style-type: none"> Sevenne bench system Griffon bench system 	<ul style="list-style-type: none"> MZ System Upper and lower body fixtures for Model S, Model X, and Model 3
Globaljig	<ul style="list-style-type: none"> 5.0 Super Rotax 6.0 Super Rotax 5.0 Mobile System 	<ul style="list-style-type: none"> Universal Fixture System Dedicated mini fixtures for Model S, Model X, and Model 3

Manufacturer	Frame Bench	Required Bench Accessories
Chief	<ul style="list-style-type: none"> Goliath E-VHT 18' and 20' Impulse (Tilt) 18' and 20' S21 and S21M Titan Excelsior EZ Liner Classic 	<ul style="list-style-type: none"> One of the Chief electronic measuring systems listed in the "Optional Electronic Measuring Systems" section of this document Structural Holding Base Kit Upper and lower body fixtures for Model S, Model X, and Model 3
Spanesi	<ul style="list-style-type: none"> 106 Bench 106 EXT Bench Pista Bench 	<ul style="list-style-type: none"> Superstar Universal Jig System Aluminum bushings for Superstar System Universal upper body system

[Frame bench data sheets](#) can be found on the [Tesla Service website](#).

Optional Electronic Measuring Systems

The electronic measuring systems listed below are approved for performing damage analysis on Model S, Model X, and Model 3 during structural repairs.

Manufacturer	Electronic Measuring Systems	Notes
Car Bench	<ul style="list-style-type: none"> Contact EVO 	Can be used as a stand-alone measuring system
Car-O-Liner	<ul style="list-style-type: none"> Car-O-Tronic Classic First Generation Car-O-Tronic Vision2 X1 electronic measuring system Car-O-Tronic Vision2 X2 electronic measuring system Car-O-Tronic Vision2 X3 electronic measuring system 	Used in conjunction with an approved Car-O-Liner frame bench
Celette	<ul style="list-style-type: none"> NAJA 3D 	Can be used as a stand-alone measuring system
Globaljig	<ul style="list-style-type: none"> GlobalSCAN 	Used in conjunction with an approved Globaljig frame bench
Chief	<ul style="list-style-type: none"> Laser Lock Laser Lock Align Vector Velocity 	Used in conjunction with an approved Chief frame bench
Spanesi	<ul style="list-style-type: none"> Touch 	Can be used as a stand-alone measuring system

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