


## Body Repair Tech Note: Approved Welders


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-16-92-007 R5, dated 16-Nov-17. Each content change is marked by a vertical line in the left margin. Discard the previous version and replace it with this one.

Use only approved welders for welding during structural repairs on Tesla vehicles.

 **WARNING:** Using non-approved welders might compromise the integrity of the repair and vehicle safety.

 **WARNING:** To maintain vehicle crash integrity, use only the welding wires specified in [BR-15-92-010](#), “Approved GMA Welding Wire for Structural Repairs” to perform GMA welding on Tesla vehicles.

 **WARNING:** Failure to follow all welding safety precautions, including the use of personal protective equipment, could result in serious injury or property damage. Only technicians who have successfully met Tesla’s requirements for welding training are authorized to weld structural components on Tesla vehicles.

 **CAUTION:** All approved welders require the appropriate training to ensure proper use.

### Approved GMA Welders

The GMA (gas metal arc) welders listed below are approved for aluminum and steel GMA welding during structural repairs on Tesla vehicles:

#### Fronius

- TransPuls Synergic 2700
- TransPuls Synergic 2700 CMT
- TPS 270i C Pulse
- TPS 320i

#### ProSpot

- SP-5
- SP-5.3

#### GYS

- NeoPulse 300-T2

## **Miller**

- Millermatic 350P

## **Cebora**

- MIG 200DP (Model 301)
- Jaguar 200DP (Model 302)
- Sound MIG 2740/T Star Pulse (Model 307)
- SynStar 330TC (Model 386)

## **Car-O-Liner**

- CMI273 Duo Pulse MIG/MAG Welder

## **Wieländer + Schill**

- InvertaPuls IP6-2 (Model WS-332007-T)

## **Chief**

- MultiMig 521
- MultiMig 522
- MultiMig 621
- MultiMig 721

## Approved Squeeze-Type Resistance Spot Welders

The squeeze-type resistance spot welders listed below are approved for resistance spot welding during structural repairs on Tesla vehicles.

Model	Required Welding Caps	Required Software Version
Chief M1200T	Chief's type A welding caps (Chief part number CEL049987)	06.00.06 or higher
Car-O-Liner CTR12000	Car-O-Liner's standard 13 mm welding caps (Car-O-Liner part number 41959)	01.01.00 Build 2 or higher
GYS GYSPOT INVERTER PTI-S7	GYS's type A welding caps (GYS part number 49987)	06.00.06 or higher
Pro Spot i5	Pro Spot's type F welding caps (Pro Spot part number PS-029)	1.7.01 or higher
TECNA 3664P Smart-Plus	TECNA's type A welding caps (TECNA's part number 5234)	Terminal software: 3.0.0 or higher Inverter software: 5.22 or higher
Wieländer + Schill InvertaSpot GT	Wieländer + Schill's form A R32 welding caps (Wieländer + Schill's part number 497005-ws)	RSS V4 version 3.0.6.7 or higher

**⚠ CAUTION:** Do not perform spot welding on panels with bare metal interfacing surfaces. If the areas being spot welded originally had factory structural adhesive, apply structural adhesive to the weld interface areas before spot welding. If these areas did not originally have factory structural adhesive, apply a suitable zinc weld-through primer to the weld interface areas before spot welding. Failure to apply a coating to the bare metal weld interface areas might result in corrosion and subsequent joint failure.

**⚠ CAUTION:** Use only insulated clamps within 200 mm (8 in) of resistance spot weld locations. Do not perform resistance spot welding when there is an uninsulated clamp within 200 mm (8 in) of the spot weld location.

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