# ART-113 Installation Instructions Center Frame at Skid Plate Mount Kit 1997-2002 Wrangler TJ





CAUTION! If you are not fully confident doing the installation yourself, have a professional welder install it, or at least have one inspect your repairs before you finish coat your Safe-T-Cap<sup>TM</sup> installation.

TJ Fitment: 3 bolt kit (ART-113) fits 1997-2002 and 4 bolt kit (ART-113-4) fits 2003-2006.

to fit factory stock frames and are designed and manufactured in the USA.

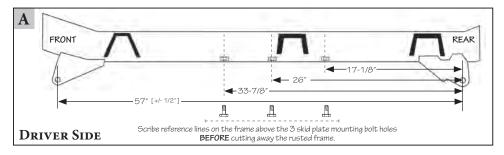
- **1.** IMPORTANT: Read and understand the "General Instructions for Installing Safe-T-Cap $^{TM}$  Frame Repair Kits" before you begin.
- 2. Jack up all 4 corners of your Jeep and support front and rear safely on 4 quality jack stands. Give yourself plenty of working space and clearance.
- 3. Put a jack stand under transfer case to support it. Remove transfer case mounting bolts and skid plate.
- **4.** Cut rear brake cable bracket off the back side of frame >> *Driver (L) side only*.
- 5. Mark area to be cut; see Illustration A, B & C. Transfer a mark from one of the original bolt hole locations to the frame above where you are cutting. You must cut away the complete bottom of the frame and leave at least 1" of the frame at the top of the frame for the kit to overlap.
- **6.** Cut away the rusted area using a plasma cutter, reciprocating saw, cutting disc or oxygen/acetylene torch. *Repair only one side at a time if replacing both sides!* [Illustration C]
- 7. Set the kit in place; push it up tight to frame and roughly mark the area where you will be welding.
- 8. Grind the areas clean where your marks are, grinding down to bare, clean metal.
- 9. Slide kit over frame using measurements from diagram to locate it correctly. [Illustration A or B]
- 10. Use clamps to hold kit in position per Illustration A or B, then temporarily bolt the skid plate up to get exact alignment, and check to make sure transfer case mount is lined up too. Tack the kit into position then remove skid plate and weld in 1" beads around all the edges continue to weld it until edge seams are 100% solid. Make it SAFE and STRONG. [Illustration D]
- 11. Prime and paint the final Safe-T-Cap™ repair and all related areas.
- 12. Check that your welds are solid, skid plate bolts are tightened, and transfer case is securely mounted.
- 13. Lower Jeep and test drive.
- 14. Inspect after one day or one mile, then monthly.

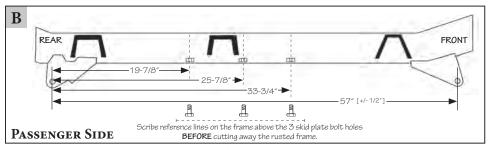
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(1) ART-113

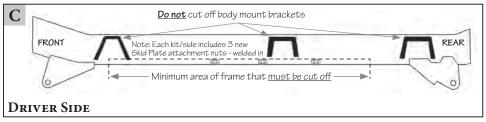
### **ART-113 Installation Instructions**

# Center Frame at Skid Plate Mount Kit 1997-2002 Wrangler TJ

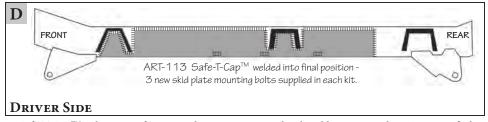




These are the factory stock frame measurements for the TJ, but keep in mind that your vehicle could vary +/-1/2" new and even more if rust has affected the structural integrity of frame. Use Illustrations A & B as a shop reference guide and get as close as possible for the ideal Safe-T-Cap<sup>TM</sup> installation results.



Use your new Safe-T-Cap<sup>TM</sup> as a guide and marker or chalk out a basic fit placement, then cut out frame  $1^m$  below the reference lines. Grind the remaining area clean and position the Safe-T-Cap<sup>TM</sup> in place with measurements referenced in Illustration - A or B.



Fit Safe-T-Cap $^{\text{TM}}$  tight up into frame. Final measure again and tack weld corners in place. Once satisfied with position and appearance, weld all edges 100% solid. Move the bead area around to avoid overheating.

ART-113 (2)

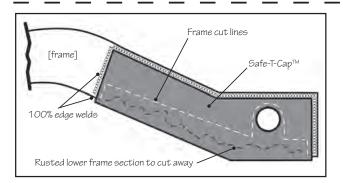
# General Instructions for Installing Safe-T-Cap™ Frame Repair Kits

General automotive welding safety, metal preparation, and frame repair guidelines to achieve long-lasting results – safely.

Attention! For your safety follow all instructions. Failure to follow instruction may result in property damage or serious or fatal injury. User assumes all liability.

#### **EQUIPMENT LIST**

- Jack Stands/Ramps/Lift
- Quick Line Disconnect
- Eye & Ear Protection
- · Work Gloves
- Fire Extinguisher & Water
- · Cutting Wheel or Torch
- Grinder or Sander
- Locking Pliers or Clamps
- · Welder: Mig or Stick
- Paint & Undercoat



#### VEHICLE PREPARATION

- 1. Disconnect the battery.
- 2. Check for fuel leaks; tank > lines > engine.
- 3. Repair or replace any leaky fuel lines before proceeding any further.
- 4. If the fuel tank leaks, remove it before, repair/replace after installation is complete.
- 5. Remove fuel tank if within 24" of the welding/repair area.
- 6. Keep flammable materials at least 20' from the vehicle.
- 7. Remove interior panels, seats, padding and carpets in the cabin area above work area.
- 8. Keep a fire extinguisher and water hose close by, use water for any fabric fires.
- ALWAYS use a Fire Watch Person when cutting or welding on a vehicle. In case of emergency, call 911 immediately.

#### WELDING & SAFETY

- 1. Take safety precautions by wearing eye protection, gloves, sturdy boots, etc.
- "Stick" or "arc" welding is difficult for some, but capable of producing a sound weld.
   For best old/new metal results, use 6011, 3/32" or 1/8" welding rods.
- 3. "MIG" welding produces a very sound weld. At Auto Rust Technicians we use 220v units with .035 wire (E7056) with a 75% Argon/25% CO2 gas mixture.
- 4. Quality welds require clean surfaces; so grind, scrape or wire brush surfaces to be welded the minimum frame temperature for welding is 50°.
- 5. Weld kit in place using 1/2" to 1" long beads every 1", then weld seams solid.
- 6. If in doubt about the techniques, equipment and skills needed for a safe and successful installation call (800)407-7024 for an appointment to install your kit at our Cranston, R.I. location, or to obtain a list of installers near you.

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ART-113

## General Instructions (con't.)

#### INSTALLING THE NEW FRAME KIT

- 1. If you are installing a right/left pair, repair one side at a time, keeping a reference/measuring point.
- 2. Support vehicle completely over a solid, level floor. Use good quality, weight-rated, safety jack stands, ramps or ideally a hydraulic lift.
- 3. Most of our kits are designed to slip over the original frame after the bottom of the frame rust is cut back, and weld in place. This helps duplicate the original dimensions, and location points, which can be lost if sections are completely removed. This overlapping Safe-T-Cap™ technique is the way we have been successfully repairing frames for over 38 years, providing superior strength while allowing you to complete the job safely and quickly.
- 4. The bottom of the frame must be cut off and area ground to clean metal at least half way up the frame. With this method the frame rust is not contaminating your new frame section. The minimum remaining can be no less than 1" of the original frame for the Safe-T-Cap™ kit to overlap and perform as designed. Measure, fit, measure, then tack weld Safe-T-Cap™ at key points, the final installation requires complete 100% edge welding.
- 5. Some frames have brackets, bumps, stops, etc. that need to be cut off and reused in order to complete the installation. Drill out the factory spot welds on these for cleanest removal.
- 6. Once welding and wire brushing is finished, brush or spray primer, then paint or undercoating.
- 7. Inspect the repair yearly.

#### SAFE-T-CAP<sup>TM</sup> ONE YEAR LIMITED WARRANTY

#### What Does This Limited Warranty Cover?

This warranty covers any defects or malfunctions in your new Safe-T-Cap $^{\text{TM}}$  frame repair product, which has been manufactured from quality cold-rolled steel at our facility in Cranston, R.I., U.S.A.

#### How Long Does The Coverage Last?

This warranty lasts one (1) year from the date of purchase and is nontransferable.

#### What Will Safe-T-Cap™ Do?

Safe-T-Cap<sup>TM</sup> will replace any defective part at no charge. You must pay shipping and all labor charges to remove and reinstall the defective part.

#### What Does This Limited Warranty Not Cover?

This limited warranty applies to the Safe-T-Cap<sup>TM</sup> frame repair components only, and covers any defects in materials and workmanship on the component. Safe-T-Cap<sup>TM</sup> is not responsible for product failure due to improper installation, or installation on modified frames and vehicles with non-standard

retrofitted suspensions. Safe-T-Cap™ is not responsible for the quality of the installation, or for any issues that may arise beyond the scope of repair for which the part was intended.

Consequential and incidental damages are not recoverable under this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

#### How Does State Law Apply?

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

#### How Do You Get Warranty Service?

In order to be eligible for service under this warranty, you must return the Safe-T-Cap<sup>TM</sup> registration card provided, within 30 days of receipt. You may also register your Safe-T-Cap<sup>TM</sup> online @ www.safetcap.com. To obtain warranty service, please call us toll free @ 800-407-7024.



We Make it Easy to Make it Safe!

Safe-T-Cap<sup>TM</sup>

1550 Elmwood Ave. Cranston, Rhode Island 02910 (401) 944-4444 (800) 407-7024 www.safetcap.com (USA) Safe-T-Cap™ products are Registered Trademark Designs developed by Revision Automotive Corporation in response to hundreds of cars, Jeeps and trucks that have required frame rot repairs. All kits/parts have been designed, manufactured, tested and installed in our Cranston, Rhode Island, USA facility – Auto Rust Technicians.

WE ACCEPT RETURNS WITHIN 30 DAYS OF RECEIPT OF PRODUCT. BUYER PAYS RETURN SHIPPING AND IS SUBJECT TO A 10% RESTOCKING FEE. TO RETURN AN ORDER CUSTOMERS NEED TO CALL 1-(800) 407-7024 TO OBTAIN A RETURN AUTHORIZATION NUMBER. WE DO NOT ACCEPT RETURNS THAT HAVE BEEN MODIFIED OR ALTERED IN ANY WAY.

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