ART-140 Installation

Rear Crossmember 1999-2006 Silverado/Sierra 1500 1999-2006 Silverado/Sierra 2500 Non-HD





Inner Plate - R





Upper Shock Mount

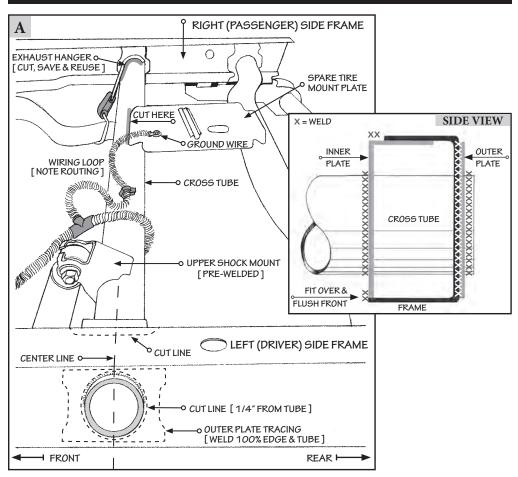
The ART-140 Safe-T-Cap $^{\text{TM}}$ rear crossmember is designed to replace the original crossmember located behind the rear axle. The ART-140 is a 3" diameter, .120" thick cross tube with end plates and a new upper shock mount welded into place. The crossmember serves to support the spare tire mounting plate as well as a hanger bracket for the exhaust tail pipe.

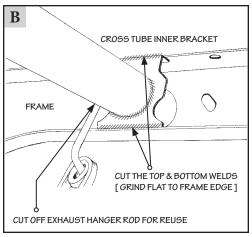
CAUTION! If you are not fully confident doing the installation yourself, have a professional welder install it, or at least have one inspect your repairs before you finish coat your Safe-T-CapTM installation.

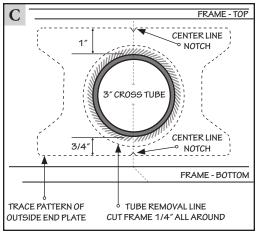
- 1. IMPORTANT: Read and understand the "General Instructions for Installing Safe-T-Cap™ Frame Repair Kits" before you begin. Support the truck on two heavy duty jack stands, create as much room as possible to work safely. Level frame left to right. *Leave the bed on.*
- 2. Remove spare tire and both rear tires.
- 3. Remove both rear shocks.
- 4. Carefully cut off the exhaust bracket as close to the cross tube as possible, reuse with the rubber bushing.
- 5. Remove the grounding wire bolt from the spare tire mount plate.
- **6.** Carefully cut off the spare tire mount plate where it meets the original crossmember.
- 7. Use the outer plates to make location marks on the outside of the frame. [Illustration A]
- 8. To remove the original crossmember, cut the frame 1/4" away from the cross tube end. [Illustration A]
- 9. Cut the inside of the frame attachment point, both sides, and grind flat to the frame. [Illustrations B & C]
- 10. Slide the inner plate for the right side (passenger) onto the cross tube.
- 11. Now slide the tube through the hole in the right side of the frame.
- **12.** Slide the left side (driver) of the cross tube through the hole on the left side of the frame until the pre-welded left side plate is in position. [Illustration C]
- **13.** Place the outer plates and inner-right plate into position and clamp. [Illustration C]
- 14. Check location of shock mount and overall alignment.
- 15. Once satisfied with initial fit, remove the ART-140 and clean all areas to be welded.
- 16. Place ART-140 into final position, clamp and recheck fit.
- 17. Tack weld outer plates, recheck location.
- 18. Weld outer and inner plates solid around perimeter.
- **19.** Position and re-weld spare tire mounting plate and the exhaust pipe hanger.
- 20. Reattach ground wire to the spare tire mounting plate.
- 21. Paint repair area and new ART-140.
- 22. Remount shocks.
- 23. Reattach exhaust tailpipe.
- 24. Remount spare and rear tires.
- 25. Lower truck to the ground and you're on the road again!

ART-140

ART-140 Rear Crossmember Installation 1999-2006 Silverado/Sierra 1500 and 2500 Non-HD







ART-140 (2)

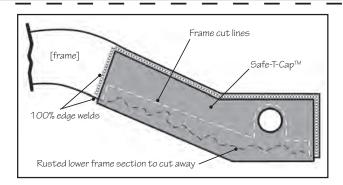
General Instructions for Installing Safe-T-Cap™ Frame Repair Kits

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.
- 2. "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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(3) ART-140

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 then welded in place. This helps duplicate the original dimensions, and location points, which can be lost if sections are completely removed. This overlapping Safe-T-CapTM technique is the way we have been successfully repairing frames for over 40 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 1/2" of the original frame for the Safe-T-CapTM kit to overlap and perform as designed. Measure, fit, measure, then tack weld Safe-T-CapTM at key points, the final installation requires complete 100% edge welding with an assistant acting as a Fire Watch.
- 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™ ONE YEAR LIMITED WARRANTY

What Does This Limited Warranty Cover?

This warranty covers any defects or malfunctions in your new Safe-T-Cap™ 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-CapTM 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™ frame repair components only, and covers any defects in materials and workmanship on the component. Safe-T-CapTM is not responsible for product failure due to improper installation, or installation on modified frames and vehicles with non-standard retrofitted suspensions. Safe-T-CapTM 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-CapTM registration card provided, within 30 days of receipt. You may also register your Safe-T-Cap™ 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-CapTM 1550 Elmwood Ave. Cranston, Rhode Island 02910 USA (401) 944-4444 (800) 407-7024

www.safetcap.com

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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