

ART-41 Installation Rear Shackle Mount Section 1967-1985 CJ5 & CJ7



ART-41 Installation Instructions

Read ALL instructions BEFORE starting the repair!

1) Safety Notes – *Follow all instructions. Failure to follow instructions may result in property damage or serious or fatal injury. User assumes all liability.*

- a) Remove the battery.
- b) You are working close to the fuel tank. Remove the fuel tank. Check for leaking fuel. Clamp off or disconnect fuel lines near the tank. If anything leaks, remove it.
- c) Remove interior panels and carpets that may burn in the area to be worked on.
- d) Keep flammable materials at least 20 feet from car.
- e) Keep fire extinguisher and water hose near vehicle.
- f) Wear safety gloves and full eye protection.
- g) Use a fire watch person when torch cutting or welding on any car.

2) Welding Styles

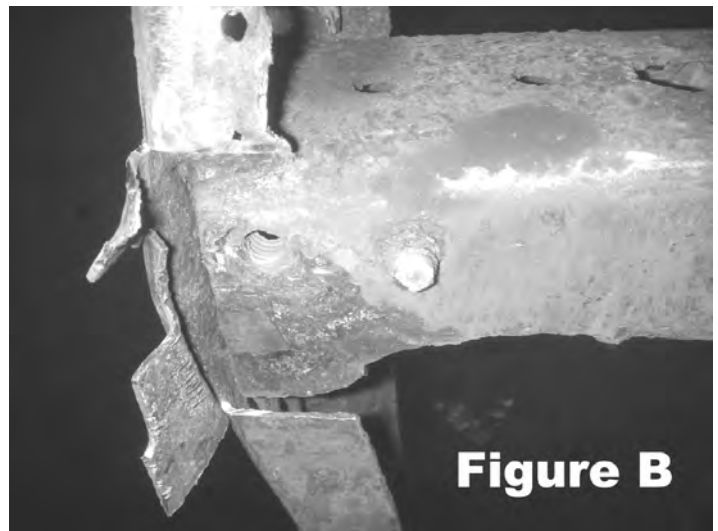
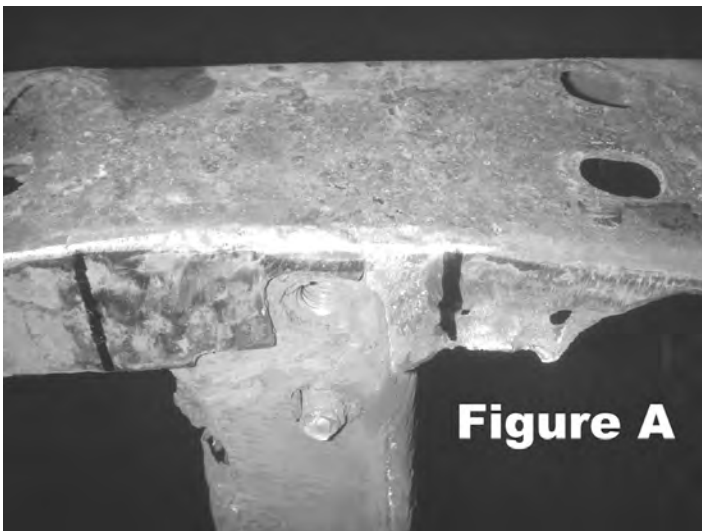
- a) “Stick” or “arc” welding is difficult for some people, but can produce a sound weld.
- b) “Mig” (wire fed) welding produces a very sound weld. We use a 220 volt machine with .035 wire (E7056) and a 75% Argon, 25% CO₂ gas mix.
- c) “Tig” is also an option, but due to the rust and other imperfections of the old material, we do NOT recommend it unless you are an experienced professional welder and know what you’re getting into.

3) Welding Notes

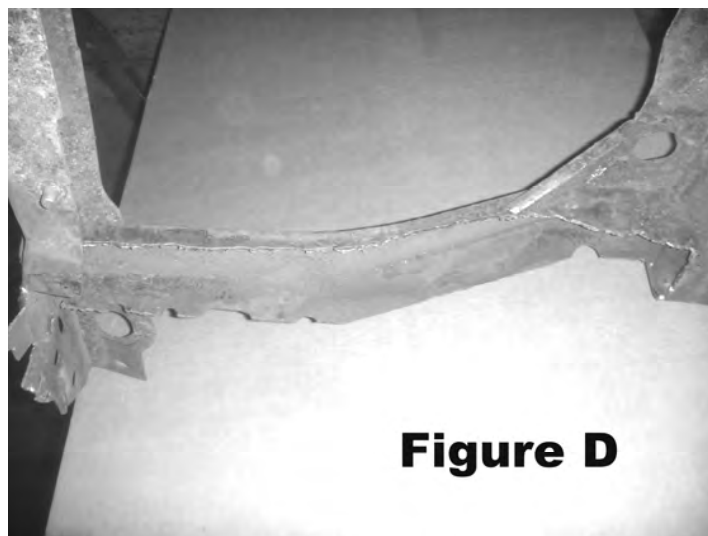
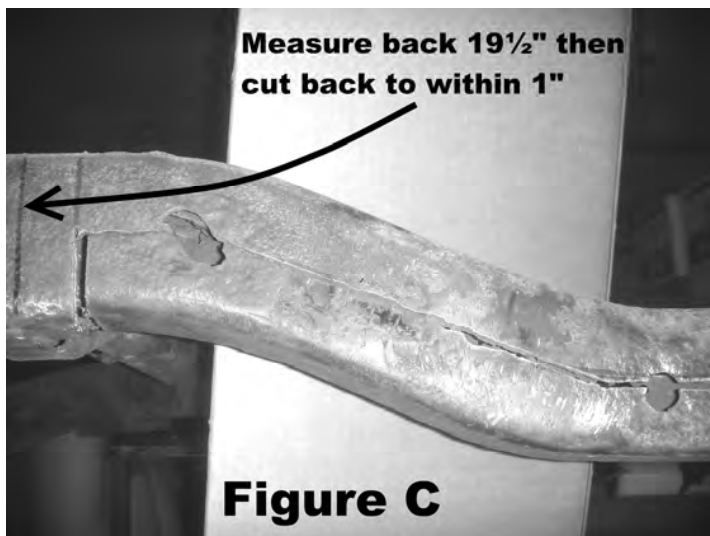
- a) Weld kit in place using a ½” to 1” long bead, spaced every 1”. You must weld the frame kit solid for maximum strength. Allow some time for cooling and move around the part.
- b) Good welds require clean surfaces, so grind, scrape or wire brush surfaces to be welded.
- c) Ambient temperature should be at least 50 degrees Fahrenheit.
- d) **If you’re not confident welding yourself, have a professional welder install it, or at least have one inspect your welds before you finish-coat the repairs.**
- e) This kit is designed to slip over the remaining intact frame and weld in place. This helps keep the original dimensions and locations, which can be lost when frames are completely removed. This technique provides superior strength and allows you to get the job done more quickly than a full replacement.
- f) The life of the repair will be extended by trimming or cutting back the rust. Allow at least ½” for overlap.

4) Preparing your Jeep for a Frame Repair Kit Installation

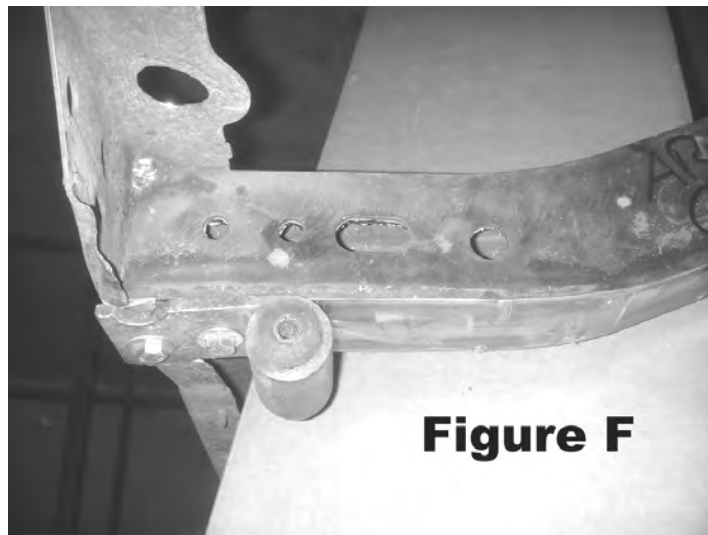
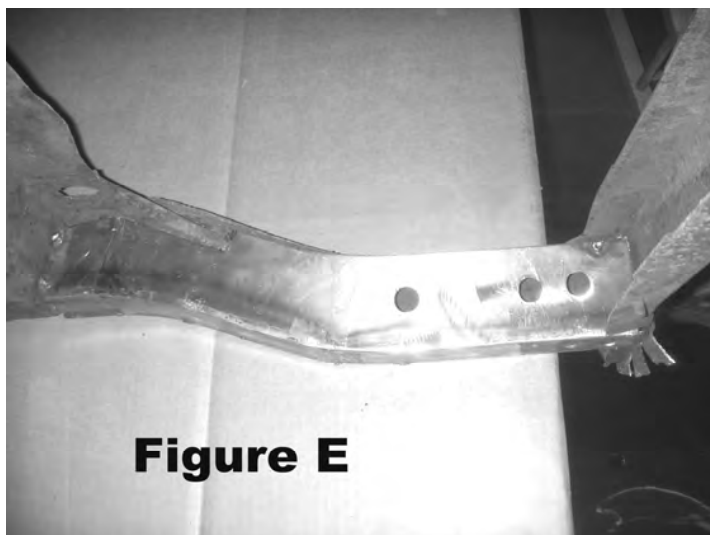
- a) Make sure you have removed the gas tank and followed all guidelines in 1b **before** you start the repairs.
- b) Make sure your jeep is properly supported on good jack stands. You should support the jeep in front of the area to be repaired. We suggest you place the stands in front of the forward leaf spring mounts. You need to allow the axle and spring to drop down out of the way.
- c) After the tires are removed, support the axle with a jack. You will need to be able to lower the leaf spring down and out of the way.
- d) Remove the two bolts holding the rear spring hanger to the frame. Sometimes these are difficult to remove. You might need to cut them out. Use caution, and try not to heat up the rubber bushing in the shackle mount. You will have to reuse this bushing – if yours isn't reusable, order new ones ASAP. You might be able to remove the long bolt that holds the shackles in place, and then you will have better access to removing the bolts that hold the shackle mount in place on the frame.
- e) Once the shackle is disconnected, lower the jack so the rear of the spring is out of your way.
- f) Measure $\frac{1}{4}$ " from either side of the frame and mark the rear crossmember (RCM). **See Figures A & B**
- g) Cut the lower lip of the RCM on lines and fold back.
Measure back from the inside of the RCM 19 $\frac{1}{2}$ " – that's where the kit covers.
- h) Measure back 1" from the 19 $\frac{1}{2}$ " line and mark your cut line. **See Figure C**
- i) On the outside of the frame, use the holes as your guide. Cut halfway through them. If rust goes past the holes, try to leave one for a location point.
- j) On the inside of the frame, cut all the rust away. The inside is usually worse than the outside. **See Figure D**
- k) Once all rust is removed, paint inside the frame with a rust inhibitor.
- l) Locate the kit. Use holes on outside to help with alignment.
- m) Use clamps to snug down to frame. (Make sure piece is snug against RCM.)
- n) Tack-weld into place. **See Figure E**

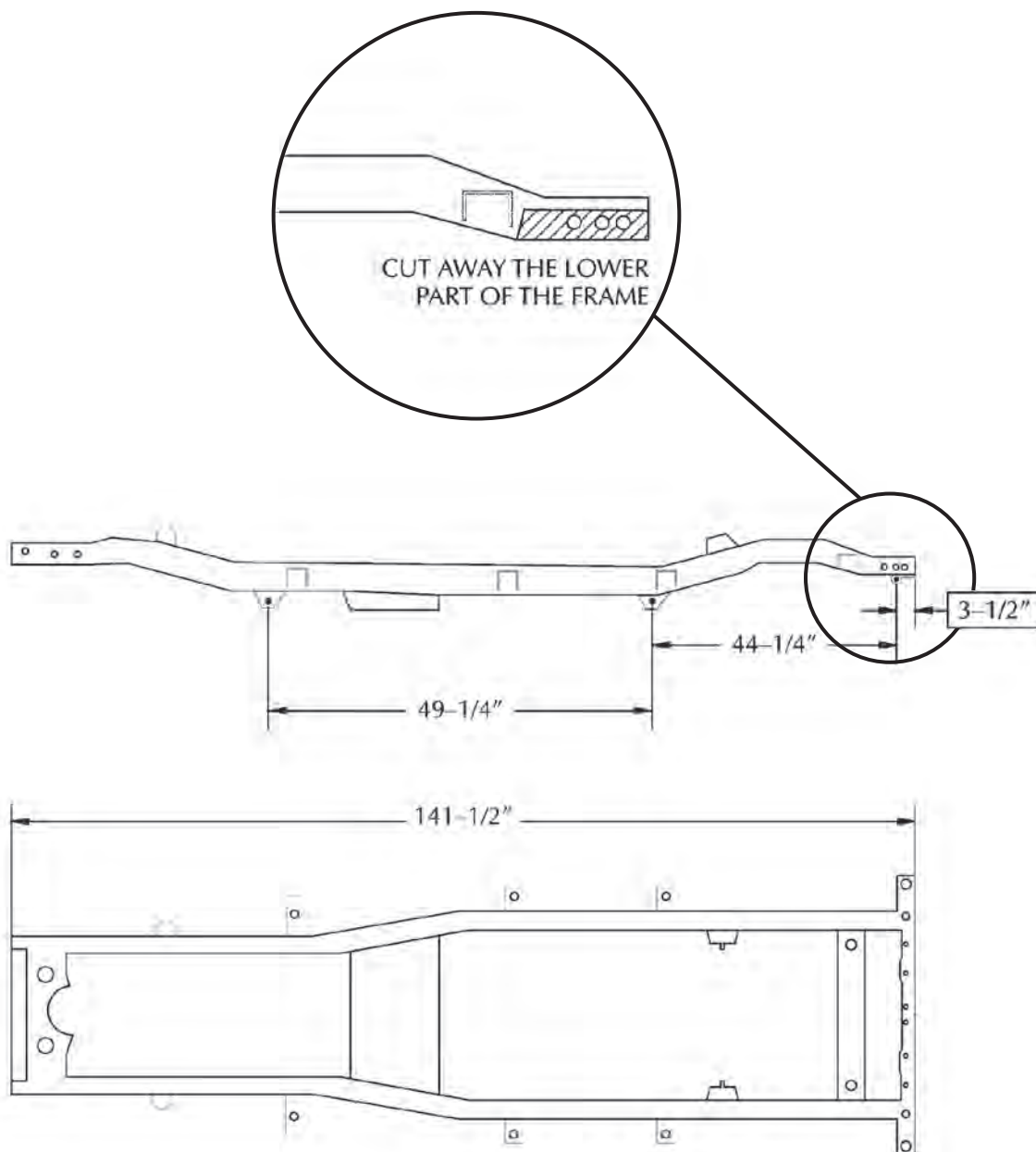


Technical support is available Mon-Fri 8-430 EST at (800) 407.7024



- o) Weld 1" beads around piece, moving from side to side.
- p) Fold tab of RCM down to meet kit and weld across.
- q) Install the 2 bolts supplied with the kit to secure the rear spring hanger in place. See **Figure F**
- r) Raise axle and spring back into place with the floor jack. Install bushing and bolt shackle back in place.
- s) Double-check that all welds are solid and that all spring mounting bolts are tightened properly.
- t) Paint or rustproof frame repair after welding is completed.
- u) Replace tire and remove jack stand.





We Make it Easy to Make it Safe!

Safe-T-Cap™
1550 Elmwood Ave.
Cranston, Rhode Island 02910
(401) 944-4444 (800) 407-7024
www.safetecap.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.

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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-Cap™ 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-Cap™ 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™ registration card provided, within 30 days of receipt. You may also register your Safe-T-Cap™ online @ www.safetecap.com. To obtain warranty service, please call us toll free @ 800-407-7024.