

Installation Instructions ART-42 Wrangler Rear Frame Kit

- Safety Notes <u>Follow all instructions</u>. 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 fuel tank. Check for leaking fuel. Clamp off or disconnect fuel line near tank. If anything leaks, remove it.
 - c) Remove interior panels and carpets that might 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 is NOT recommended unless you're an experienced professional welder.

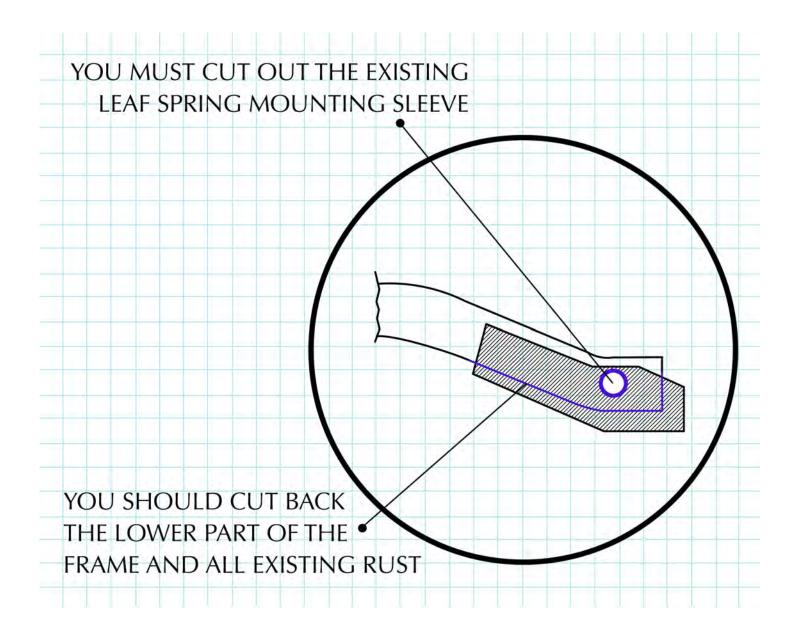
3) Preparing a Car for New Frame Section and Kit Installation

- a) Support vehicle properly over a solid, level floor. Use <u>good</u> safety stands don't cut corners here! or a lift.
- b) 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.
- c) The life of the repair will be extended by trimming or cutting back the rust. Allow at least 1/2" for overlap.
- d) On your Wrangler, you must cut away the old steel sleeve in the rear frame rail. While you are cutting, it's a good idea to trim the rust back to good solid metal. See illustration on page 2.
- e) Some frames have brackets, bump stops, etc. that might have to be cut off and welded back on after the kit is installed. Drill out spot welds on such parts for a clean cut.

f) Paint or rustproof frame repair after welding is completed.

4) Welding Notes

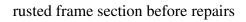
- a) Weld kit in place using a 1/2" to 1" long bead, spaced every 1". You must weld the frame kit solid for maximum strength. Allow some time for cooling and move around the part.
- b) Good welds require clean surfaces, so grind, scrape, or wire brush surfaces to be welded.
- c) Ambient temperature should be at least 50 degrees Fahrenheit.
- d) If you're not confident welding yourself, have a professional welder install it.





steel sleeve removed and rust cut back

note we leave the top in place to help maintain the original alignment







Safe-T-Cap kit in place ready to be welded in

repairs primed and ready for undercoating





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

