

ART-103 Installation Instructions

Wrangler YJ Forward Leaf Spring Mount

Read ALL instructions BEFORE starting the repair!

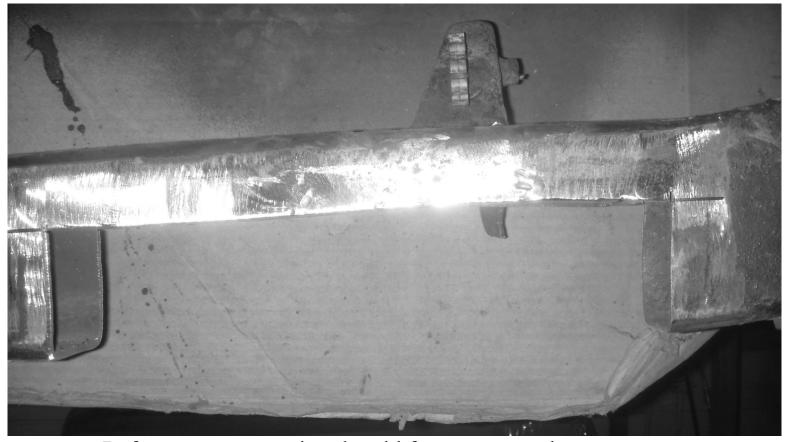
- 1) Safety Notes <u>Follow all instructions.</u> Failure to follow instructions may result in property damage or serious or fatal injury. User assumes all liability.
 - a) Remove the battery.
 - b) Look for fuel lines. If you are working close to the fuel system, check for leaking fuel. Clamp off or disconnect fuel lines if needed. If anything leaks, remove it.
 - c) Remove interior panels and carpets that may burn or melt 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 whenever 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) Preparing your Jeep for a New Frame Section & Kit Installation

a) Support your Jeep properly over a solid, level floor. Use <u>good</u> safety stands – don't cut corners here! – or on an automotive repair shop lift. You should support the Jeep by the frame so that the suspension is unloaded, or hanging; this will make it easier to lower the leaf spring.



- b) Before you start cutting the old frame away, take a measurement or two and record them. You want to be sure it is welded in at the original location when you install it. Measure the distance from the rear crossmember forward to the hole center of the spring perch. We have 48-3/4", also measure forward from the rear cross member, we have 48-1/4".
- c) 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.
- d) Paint or rustproof frame repair after welding and inspection is completed.

4) Welding Notes

- a) You must weld the frame kit solid for maximum strength. Allow some time for cooling and move around to different locations on the frame repair kit.
- 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.

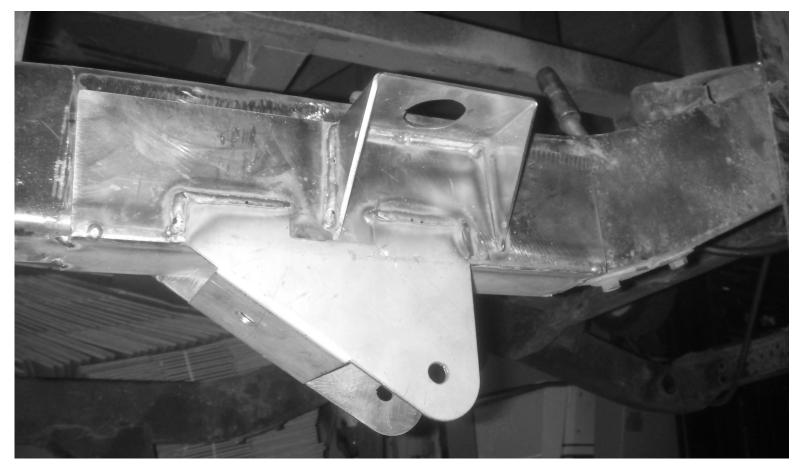




d) If you're not confident welding yourself, have a professional welder install it, or at least have one inspect your welds before you finishcoat the repairs.

5) Preparing your Jeep for a Frame Repair Kit Installation

- a) Hold the kit up to the side of the frame and mark out the area you will be cutting back.
- b) We suggest you mark the frame at 43-1/2" forward from the rear crossmember, and 55-1/4". This will allow a 1 inch overlap for our repair kit to cover.
- c) You will be cutting away the frame to body mount, so now is a good time to replace the rubber body mount bushing. Unbolt the mount before you cut out the bottom of the frame and remove the frame to body mount.
- d) It's important that the spring mount hole is in the correct location see the frame diagram for dimensions.



- e) It's okay to mark a reference point above on the floor pan, but always measure before cutting the old mount away.
- f) Position kit in place and double-check placement.
- g) If the kit is in the correct location, and it matches up to the measurements you recorded before cutting it away, you're in good shape, and almost done. It's time to weld it in place. Set the welder, and get started, move around and don't overheat one area. Run a bead 1-2 inches long, then move to another area, do the same thing. Take your time and do a good job. We know you're anxious to get back on the trail, but be sure to get this right. The welding is critical.

