

THIS KIT INVOLVES EXTENSIVE WELDING AND GENERAL FABRICATION SKILLS. ONLY COMPETENT WELDERS SHOULD ATTEMPT TO INSTALL THIS KIT.

Tools Required :

Safety Glasses, Gloves, Tape Measure, Socket Set, Wrenches, Wheel chocks, Jack, Jack stand. Cutting Tool of your choice (Sawzall, Grinder, plasma, cutting torch) Welder.

Step 1:

Inventory that you have all of the parts for your order

Step 2:

Place wheel chocks at the front wheels of the vehicle. Break free lug nuts on rear wheels (Do not fully loosen or remove lug nuts yet.)

Step 3:

With the vehicle sitting on the ground, Measure your ride height at the frame and height of the centerline of the axle, Also take measurement of your wheel base.

(Make a note of this for later.)

Step 4:

Jack up the rear of the vehicle and set the axle on Jack stands, Remove the rear wheels from the vehicle, With the wheels removed Jack the vehicle up again. Securely place tall jack stands under the frame in front of the LCA or Leaf spring mounts at the previously measurement of ride height. Place a 2nd set of jack stands under the rear axle.

Step 5:

Remove the existing rear axle from the vehicle. If you are stretching wheelbase back far enough for axle to interfere with fuel tank you will also want to Remove the fuel tank and set it in a well ventilated area away from where you will be working and welding.

Step 6:

Prep axle the truss will be welded onto by removing all mounts and paint/ rust. Once the axle is prepped. Slide new axle under the vehicle and place on jack stands at the measurement of what the centerline height was at ride height also make sure it is set to the wheelbase you will be using.

Step 7:

Using another jack stand or block of wood set under the pinion on the axle set the desired pinion angle of your build to ensure it does not get changed . Now place the truss on top of the axle so it is level with the ground and not tilted forward or backward (If your truss is angled it can cause upper arm mounts or the truss to twist off under load) You may need to trim some gussets on the truss to allow it to sit level depending on your wheelbase and pinion angle. (Ford 9" trusses will need to be trimmed to fit your axle)

Step 8:

With the truss set level on top of the axle tack weld The truss ends to the axle tubes.

Step 9:

With the truss tacked into place Pull the rear axle from under the vehicle to allow more space for welding. Once the axle is pulled from under the vehicle. Heat the axle to about 400 degrees Start to weld the gussets to the axle and truss .When welding, Start on one side of the axle, Weld a small amount, Then move on to the opposite side of the axle to allow each side to cool. This will help prevent warping .Stitch welding is preferred and welding every inch of every seam is not necessary. Grind and clean the rosette welds on the axle. If your truss has a bridge you may need to Trim the bridge depending on your pinion angle and weld it to the truss. (Optional) Stitch weld the axle tubes to the ends of the casting for added axle strength and to prevent the axle tubes from twisting. If you have any Control arm mounts, Shock mounts, Coil over tabs, Track bar mounts that need to be welded on to the axle you will need to place the axle under the Jeep on jack stands at ride height and desired wheelbase an weld them on at this time in their proper location for your specific build. Once all of the welding is complete you will wrap the axle in a welding blanket to slowly cool overnight.

Step 10:

Clean the Truss and axle of any machining oils and Prep for paint or powder coat.

Step 11:

Install the axle back under the vehicle and place on jack stands. If you removed your fuel tank you can reinstall it at this point. Install the wheels on the vehicle and tighten the lug nuts (Do not torque them down yet.) Lift the vehicle and remove all of the jack stands and set the vehicle on the ground. with the vehicle on the ground check all of the bolts and lug nuts are torqued to proper specs. we recommend drawing a line on the nut and bolt heads and where they are mounted for quick reference when checking for tightness after 50 miles .