# Jeep TJ and LJ Wrangler Jeep M220 14 Swap Truss Kit

# Installation Instructions

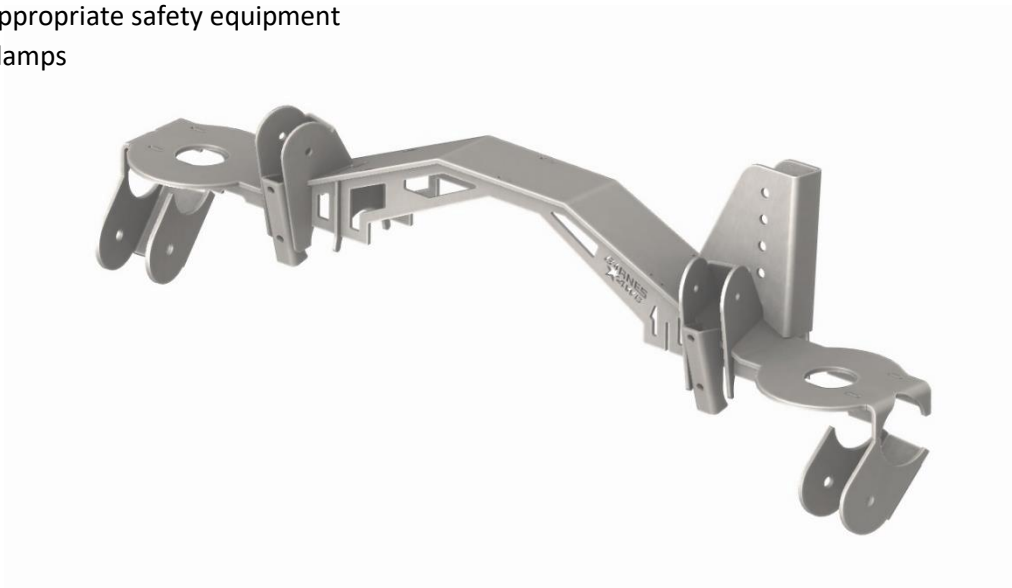
Thank you for purchasing this product!

Installation Notes:

- This Kit Fits Jeep TJ/LJ 1997- 2006
- Installation of product requires a trained welder.
- Refer to your factory service manual for information regarding removal of the factory rear axle.
- An adjustable track bar is recommended.
- This kit contains no provisions for brake line, driveshaft, and emergency brake modification They are the responsibility of the end user.
- All Factory brackets need to be removed from the M220 axle before beginning the installation.

Tools required:

- Welding machine with the capability of welding at least ¼" thick steel
- Tape measure
- Angle Finder
- Level
- Appropriate safety equipment
- Clamps



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# Contents of each box

| Bill Of Materials For B4WK12866 | | | |
|---|---|---|---|
| **QTY** | **Part Number** | **Etch Number** | **Description** |
| 1 | B4W250C01 | C01 | TJ/LJ JT&LJ Rubicon Rear Axle Swap Top |
| 1 | B4W250797 | 797 | TJ Rear Axle Shock Mount R |
| 2 | B4W250352 | 352 | TJ 8.8 Kit Coil Spring Retainer V2.0 |
| 1 | B4W250351X | 351 | TJ 8.8 Kit Left Hand Lower Control Arm Bracket V2.0 |
| 1 | B4W250350X | 350 | TJ 8.8 Kit Right Hand Lower Control Arm Bracket V2.0 |
| 1 | B4W250291X | 291 | TJ Rear Axle Shock Mount L |
| 1 | B4W188C33 | C33 | TJ/LJ JT&LJ Rubicon Rear Axle Swap Rear Plate |
| 1 | B4W188C32 | C32 | TJ/LJ JT&LJ Rubicon Rear Axle Swap Front Plate |
| 2 | B4W188972 | 972 | TJ Rear Coil Spring Center |
| 4 | B4W188971 | 971 | TJ Rear Coil Spring Center Half |
| 1 | B4W188231X | 231 | TJ 8.8 Kit Track Bar Bracket V2.0 |
| 1 | B4W188230X | 230 | TJ 8.8 Kit Left Upper Control Arm Bracket V2.0 |
| 1 | B4W188229X | 229 | TJ 8.8 Kit Right Upper Control Arm Bracket V2.0 |
| 2 | B4W188228X | 228 | TJ 8.8 Kit Sway Bar Bracket V2.0 |
| 1 | B4W188227X | 227 | TJ 8.8 Kit Short Gusset |
| 1 | B4W188226X | 226 | TJ 8.8 Kit Long Gusset V2.0 |
| 6 | 37NWSAFY | | 3/8 ZY L WASHER HARDENED |
| 6 | 37CNFH8Y | | 3/8-16 Nut |
| 6 | 37C100HCS8Y | | 3/8"-16X1" Hex Head Grade 8 |

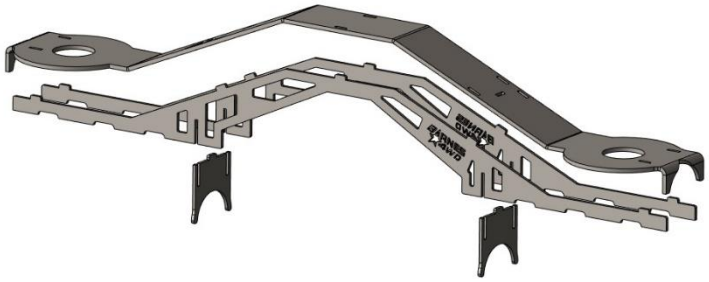
## Step1:

You will need to establish the existing pinion angle of the axle in your vehicle. This number will be unique to your Jeep, depending on the amount of lift you have, type of rear driveshaft, and several other factors. This number usually ranges from 10-20 degrees. With the vehicle sitting level and at ride height measure the pinion angle of your existing axle with an angle finder. Place the angle finder on the front flat face of the pinion yoke, record this number.

## Step2:

Place your JT/JL Rubicon axle on a sturdy work surface. Place the axle at the same pinion angle as the axle in your Jeep. Three jack stands can be used, one under each axle tube and one under the pinion to set and hold the pinion angle.

## Step3:

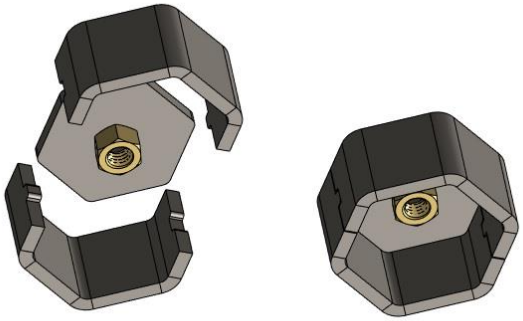


Tack weld the top, sides, and the two gussets of the truss together. The tabs on the angle section of the side plates will appear not to line up. You will need to flex the top of the truss to line the tabs up to insert in the holes. After the center 3 tabs are inserted in the truss top use a clamp to pull the outer two tabs in. Repeat this for the other side plate.

## Step4:

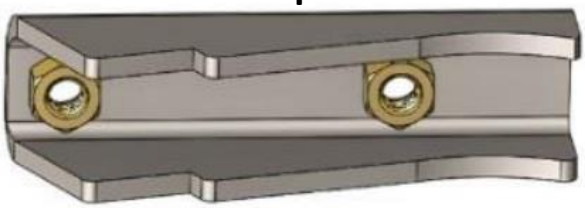
Place the assembly of the pieces that you just tacked together on top of the axle. Center the assembly by measuring from the backing plates on the axle to the truss top. Use a level or angle finder on top of the truss to level the assembly on the axle. Using clamps, clamp the truss to the axle tube to ensure that the truss is pulled all the way against the axle tubes. Tack weld the truss to the axle tubes in several locations and remove the clamps.

## Step5:



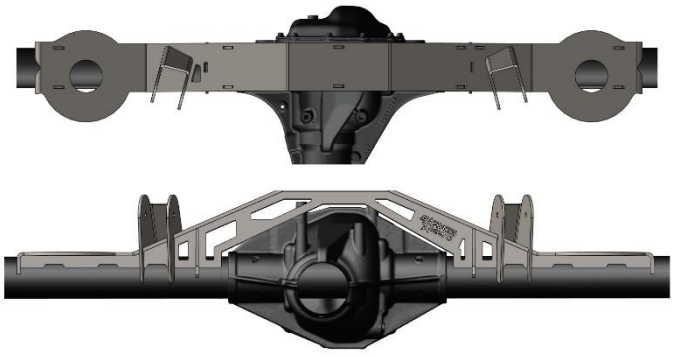
The 3/8” nuts provided in the kit need to be welded to the coil spring caps. Center one nut on one coil spring cap and weld the nut to the cap, repeat this step for the other coil spring cap. Now the assembly is ready to be welded as shown above.

## Step6:



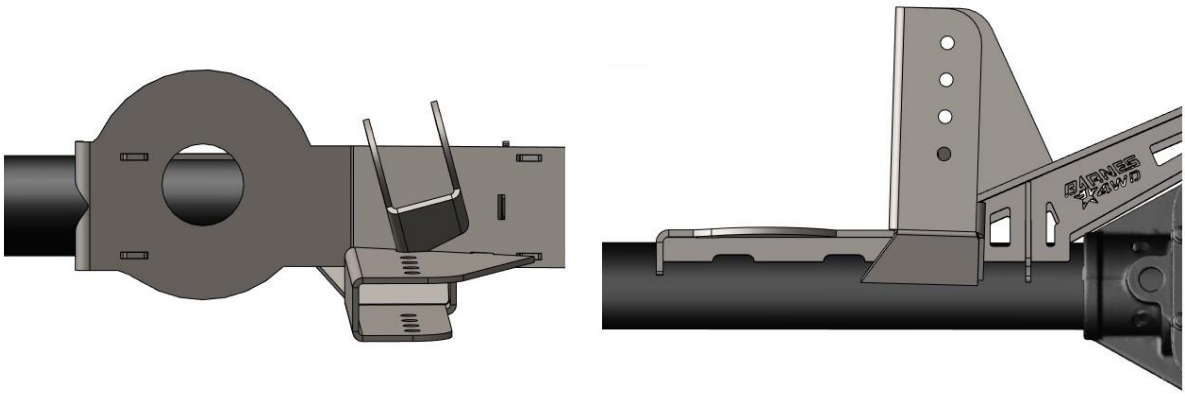
The sway bar brackets will also need nuts welded to the backside. Place one 3/8” nut over each hole on the backside of each bracket and weld in place.

## Step7:



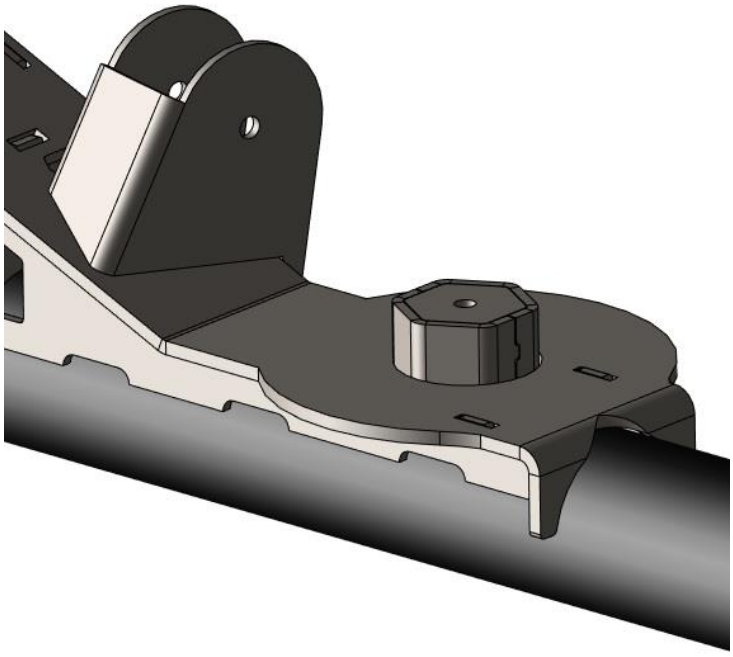
Add the upper control arm brackets to the truss. Place the upper control arm brackets on top of the truss as shown in the image below. Slide the brackets down the truss until they are in their correct position. When placed correctly they should contact the truss and the axle tubes, tack both brackets in place.

## Step8:



Install the track bar bracket. The track bar bracket will be placed on the backside of the truss, it will locate with a tab on the bottom of the bracket in a slot on the top of the truss. Tack weld the bracket when positioned correctly.

## Step9:



Install coil spring caps and nut assembly from step 5 in the holes on either side of the truss and tack weld in place.

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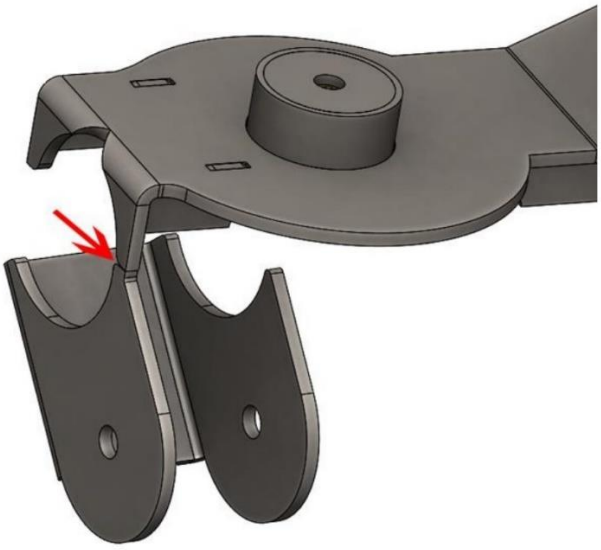
## Step10:

Install the sway bar bracket assemblies from step 6. Place the brackets on the axle tube inside the upper control arm brackets. The sway bar brackets should be vertical, and the upper inside corner should touch the inside of the upper control arm bracket on the side closest to the pinion. When positioned correctly tack weld the brackets to the axle tube.

## Step11:



Install the lower control arm brackets. Place the lower control arm brackets on the axle tube, the brackets should point in towards the pinion when on the correct side. Line the upper outside corner of the lower control arm brackets up with the corner of the leg on the truss top. Once lined up, the bracket is positioned correctly. Tack weld the brackets in place.

## Step12:

Install the shock brackets on the axle. Using the measurements obtained from your factory axle as a guide. Tack weld the shock brackets to the axle.

## Step13:

With all components tack welded in place, test fit the axle under the Jeep. Determine which hole location in the track bar bracket is correct for your Jeep. Trim the excess height off from the track bar bracket, failure to trim the bracket can cause damage to the Jeep! Cycle the rear suspension and verify that there is not any interference with any of the components of the Jeep.

## Step14:

Remove the axle from the Jeep and finish welding the brackets and truss. Do not concentrate welding heat on one location of the axle at a time. Weld in small 1”-2” increments and move around on the axle housing after each weld. Weld the truss and brackets to the tubes of the axle first, then weld the brackets to the truss and the truss together. Welding all the seams 100% on the truss is not required, staggered welds are acceptable.

## Step15:

During installation the factory rear Jeep sway bar will be re-used. Install the coil spring retainer plates after the coil springs are installed.

## Congratulations you have now completed the installation.