

"Master Your Terrain"

XD JK D30/44 Front Axle Truss

Installation Instructions

Congratulations for purchasing TNT, Inc. Extreme Duty Front Axle Truss. Begin by unpacking your kit and comparing the contents to the packing list provided as attachment "A" to this manual. Please observe proper shop safety procedures when performing this install. Use proper eye and hearing protection as required and use safe jack stands/supports, place appropriately for supporting the vehicle while you work on it.

NOTE: Trusses are welded in a jig but due to the extreme amount of heat that occurs during the manufacturing and assembly process some warp-age or twisting of the truss can not be avoided. This is normal side effect of the manufacturing process and it does not affect the integrity or strength of the truss. Follow the steps below and when performing final mounting of the truss to the axle simply clamp the drivers side down first then work your way across the truss clamping as you go if needed.

STEP 1: Removal and Prep

Begin by completely removing the axle from your JK.

Prepare the axle that the truss will be installed on, both JK D30 & D44 axles will require removal of the UCA mount's, coil spring mounts and trackbar mount. Do not remove lower shock mounts, sway bar mounts or LCA mounts unless ordered. It is important to have a clean surface to weld to. We recommend that the axle be cleaned with a flap disc attached to a 4.5" Grinder. This assures a clean surface to weld to.

STEP 1:

Place an angle finder on top of the upper ball joint and set the axle at 5 degrees positive caster (axle rotates clockwise). Place the truss on the axle at zero degrees. <u>Some minor clearance and/or trimming</u> may be required depending on your application.

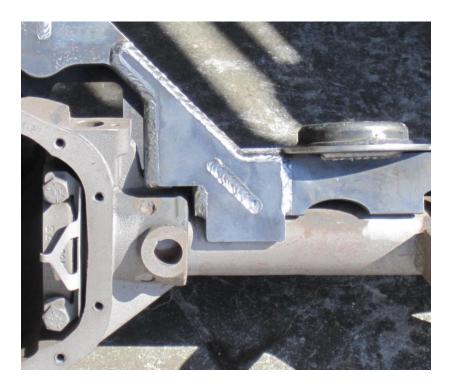
STEP 2:

Once you content with the location of the truss tack it into place. Tacks should be located at the outside and inside corners. You are now ready to weld the truss to the axle tubes [DO NOT WELD THE TRUSS TO THE CENTER SECTION/HOUSING]

STEP 4:

A)The proper welding sequence is as follows: Mark out every 1.5" on the truss where it comes in contact with the axle tube. Once this is done you are ready to weld. A certified/qualified welder is recommended for this. If you weld too hot, or the whole truss in one pass you WILL likely distort the housing/tubes. Take your time, and allow the axle to cool. Begin by welding the first 1.25" on the outside of the passenger side. Now weld the opposite side of the truss on the driver's side. Now go take a break and work on something else. Allow at least 10 minutes between each pass. The next weld will be located on the inside of the passenger side, and the inside of the driver's side. Repeat this process until the truss is welded to the axle tubes. Once the truss is mostly welded into place, locate the tab that hangs down from the truss on the front driver's side as seen in Figure 2. Using a heavy mallet, pound this tab down until it comes into contact with the axle tube, weld tab to axle.

Figure 2



STEP 5: HD Lower Control Arm Mounts (optional)

To locate HD LCA mount on the axle line up the mount with notches that are precut into the truss (see Figure 2). Rotate mount upwards until mount sits against the truss, tack in place. Repeat step for opposite side. Once satisfied with location of lower control arm mounts, weld them into place.



Fig. 3 – passenger side view from behind axle

STEP 6: Installation of inner C gussets (optional)

Locate the inner C gussets provided with your order. Place them over the upper C's and against the top of the truss as seen in Figure 3. Repeat for opposite side. Once satisfied with their placement, weld the gusset where it contacts the casting as well as to the truss.





STEP 7: Reinstallation of Axle

Once all welding is completed and the axle is cool you can reinstall axle into Jeep.

Note: 2012 & newer JK's need to verify truss to oil pan clearance with the suspension fully compressed. Depending on lift height, additional bumpstopping may be needed to achieve proper clearance between oil pan and top of truss.

Appendix A Parts List:

XD Front Axle Truss UCA Bushing Kit

- 2 12mm x 80 allen head bolt
- 4 12mm washers
- 2 12mm locknuts
- 2 steel bushing sleeves
- 2 pairs poly bushings

Optional Items: Lower control arm mounts Inner C gussets