ARTEC INDUSTRIES ZJ 8.8 SWAP KIT W/ TRUSS INSTALLATION INSTRUCTIONS

Thank you for your purchase of our truss kit specifically designed to take the headache out of doing an Explorer 8.8 swap in the back of your Jeep Grand Cherokee. This bracket system is unique in that everything is designed around the truss, making installation of all the other brackets fast and easy. If you have any questions that are not answered in these instructions, please feel free to contact us directly at sales@artecindustries.com and we will be more than happy to help you.



Final product may differ in appearance

A - (1) Main truss top B - (1) Long truss gussets (lengthwise) C - (2) Small truss gussets (shortwise) D - (1) Medium truss gusset (shortwise) E - (1) Upper control arm mount (solo) F - (1) Upper control arm/tracbar side G - (1) Upper control arm/gusset side H - (1) Main Tracbar bracket I - (2) Anti-sway bar mounts J - (2) Coil Spring bottom plate K - (2) Machined coil buckets L - (2) 1/2 inch bolts (not shown) M - (2) Coil Retainer with bolt hole N/O - (2) Lower control arm mount (R/L) P/Q - (2) Shock mounts (R/L) R - (2) coil plate gussets

EVERYTHING STARTS WITH THE TRUSS

Slide (E),(F) and (G) into their respective jigs on (A).
 Slide both pieces of (C) and (D) onto the jigs for (B).
 Align the cutouts of (A) with the jigs of (B), and place the pieces together. The jigs will prevent backwards installation.

4. Tack weld (A) and (B) together so that whole assembly holds together. Do not weld any other pieces.

5. Rotate new axle to achieve desired pinion angle. This can vary between 12-17 degrees usually depending on your lift. Set axle so angle doesn't change using jack stands or other method of securing.

6. Place truss assembly on prepped bare axle so that it is LEVEL with the ground. There should be equal spacing between the ends of the casting and the inside base of (B) making the truss centered on the axle width even though the differential is offset. Due to manufacturing variations of the 8.8 axle over the years, some small amounts of grinding may be needed to clear all parts of the truss. Tack weld truss ends to axle.



7. Place (H) into jigs of (G) and align as shown in the inset above. Lightly tack weld together ensuring upper control arm tabs are 2 inches apart and tracbar tabs are 1.625 inches apart. For best results, bolt in control arm and tracbar.

7a. (Optional) Drill upper control arm and tracbar brackets to appropriate hole size of your aftermarket joint size. The hole sizes provided are for factory control arms and tracbar. The upper tracbar hole is for lifts.

NOTE: THIS KIT INVOLVES EXTENSIVE WELDING AND GENERAL FABRICATION SKILLS. ONLY COMPETENT WELDERS SHOULD ATTEMPT TO INSTALL THIS KIT.* 8. With all truss related parts on the axle, place (J) Coil bottom plates on axle and slide in until the sides touch the ends of the truss (A). The coil plate is offset towards the front of the vehicle, so make sure the larger part of the plate hangs over the front of the axle. Tack in place at a 2 degree angle where the front of the coil perch is downward. Tack in (R) coil plate gussets, 2 on each side. Repeat for other side.
9. Place (K) on (J) and align holes. Rotate (K) until the flat section where the machined groove starts is toward the back of the axle and at about the 1 o'clock position. Tack weld to (J)

on the outside of the larger diameter circle.



10. Place (N/O) lower control arm mount on axle and space 1/2 inch between the outside edge closest to the center of the axle of (N/O) with outside edge of (A). These mounts are side specific, so ensure they angle towards the center of the vehicle. If using OEM control arms, tack weld mounts at about 73 degrees from the level top of the truss. If using *aftermarket adjustable control arms*, choose your desired angle for greater ground clearance. NOTE: P/Q welds partially to the back side of N/O, so rotating N/O up will require modification/reinforcement of the shock bracket P/Q.
20 der 11. Place (P/Q) shock mounts on axle and arrange for notched cutout to intersect with (N/O) on the side towards the ends of the axle. These mounts are side specific, so ensure the notch is facing the center of the axle. This should make the back of the mounts at 61 degrees from the level truss top (A). Tack weld in place.

12. Place inside edge of (I) anti-sway bar mounts 6.5 inches from the outside edge of (A) on axle tube. Rotate top up 20 degrees from level, pointing backward. Tack weld.13. With all brackets lightly tack welded in place, axle assembly can now be placed under vehicle for any adjustments necessary to fit the bracket in their proper locations. Bolt up control arms, tracbar, anti-sway bars, shocks, and coils as though your were mounting it. Make adjustments as necessary to ensure proper fitment. Set axle at ride height to ensure the axle is centered side-to-side. Place larger tack welds on all unsecured brackets and then disassemble from vehicle.

14. Once axle is removed from underside of vehicle and all brackets have been determined to be in their proper location, commence final welding of all pieces. 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 PLUG WELDS. IF TRUSS GUSSETS ARE DIFFICULT TO COMPLETE-LY WELD, CONSIDER REMOVING TRUSS FROM AXLE TO WELD ALL GUSSETS, THEN FULLY WELD TO AXLE.
15. (Optional) Stitch weld the axle tubes to the ends of the casting to prevent the axle tubes from twisting.

16. (Optional) The axle breather valve is located under the tracbar mount and may need to be relocated. Brake brackets need to be relocated as well. Use the OEM parts from the factory axle if necessary.

17. Bolt up axle to vehicle. Other steps are necessary for a full 8.8 swap but are not addressed here. Search the internet for *ZJ* 8.8 *swap* for complete instructions.

18. Paint brackets, truss, and axle to prevent rust.

For further questions and comments, please email sales@artecindustries.com.

*Artec Industries, LLC is not responsible or liable for improper installation of this kit. Use common sense when installing.

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Hint: For best appearance, clean up plug welded holes with a grinder or flap disc for a smooth surface.