

INSTRUCTIONS

916-4515



TRIANGULATED REAR 4-BAR INSTALLATION

WARNING: YOU MUST USE ANTI-SEIZE ON ALL THREADS. FAILURE TO DO SO WILL CAUSE THREADS TO GALL AND SEIZE UP. THERE IS NO WARRANTY ON GALLED OR STRIPPED THREADS.

1. Insert the bushing halves and sleeves into the 4-bars and rod ends, install jam nuts. Assemble rod ends into 4-bar tubes, leaving 6 full threads exposed. Assemble the 2 short links (upper) to be the same length and the 2 long links (lower) to be the same length. (temporarily install a long bolt through both ends of each pair of links to assure that they are the same length and that all 4 bushing ends are parallel)

2. Position frame securely on 4 jack stands at a height that allows you to work and weld comfortably under the car. Simulating ride height and rake will be helpful. Grind or strip any paint or rust scale from rear end housing in the areas where brackets will be welded in place.

3. Mark the rear axle center line on both framerails for reference. Rear axle centerline can be determined by the location of the original rear axle, by centering the axle in the wheel opening of the body, or by using the appropriate wheel base dimension for your car measured back from the front axle centerline. Measure again, this is critical.

4. Position rear axle assembly under chassis; use 3 jackstands (one under each axle tube and 1 under the pinion). Top of axle housing tube should be 3-4" below bottom of frame rail. Using a plumb bob or similar device align the center of each axle tube with the rear axle centerline marks on the frame rails. Measure from the frame rail (or other common point) to the axle housing flange on each side, and center the rear axle within the chassis from side to side.



5. Shim or adjust stand under pinion to maintain proper pinion angle. If your engine sits level in the chassis, set the pinion angle to "0". If your engine tilts down in back 2 degrees, tilt the nose of the pinion up 2 degrees. Crankshaft and pinion should be parallel.

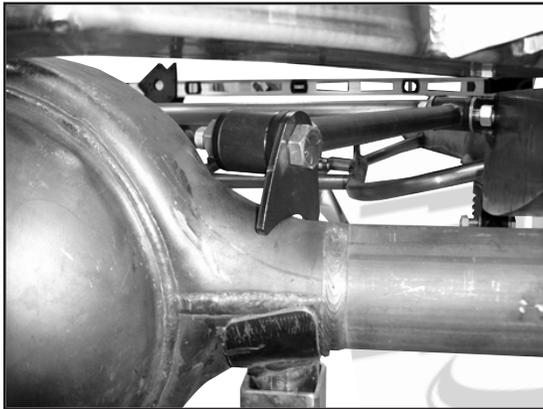
6. Install the 2 long links onto lower frame brackets, insert bolts and tighten nuts (the adjustable end of each link can be located at the chassis or at the rear end housing depending on personal preference). Install housing bracket / lower shock mount on the aft end of the lower links, insert bolts and tighten nuts. Swing bar up until the housing bracket cradles the axle housing, clamp in place. Repeat on the other side.

7. The aft face of the housing bracket provides the mounting holes for the rear shocks. This flat vertical surface must be perpendicular to the frame. Place a protractor or inclinometer on aft face of housing bracket and adjust length of lower link as required so that bracket is 90 degrees to the frame rail. Be careful not to disturb rear end housing which would change pinion angle or wheelbase.



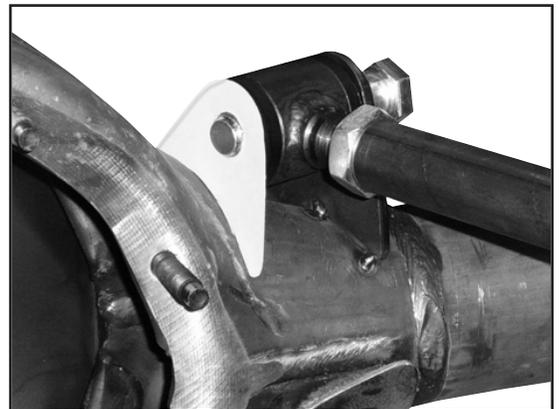
8. Width of aft 4-bar housing brackets should be the same as width of forward 4-bar brackets on frame. Make sure that both housing brackets are the same distance from the housing ends, and centered between frame rails.

9. Re-check everything. Make sure rear end is centered in chassis. Make sure pinion angle is correct. Make sure rear end is on axle centerline. Make sure housing brackets are centered on rear axle housing with aft face perpendicular to chassis. Tack weld housing brackets / shock mounts to axle housing.



10. Locate upper 4-bar mount tabs (2 large 2 small) lay the 2 small tabs aside for later use. Install one of the upper 4-bar links on the forward upper frame bracket, insert bolt, tighten nut. (verify the both link bushings are parallel and jam nut is tight) On the other end install 1 of the large tabs on the outboard side of aft upper link bushing (yes, install only 1 tab). Insert bolt with bolt head outboard, tighten nut. Swing upper link bar down into position, adjust tab so that the radius sits evenly on axle housing. Tack weld tab to housing, repeat on other side.

11. Remove nut from housing end of one upper link. Position one of the small tabs on the inboard side of upper link. Note that material will have to be removed from curved portion of tab in order to fit the contour of the rear end housing. (some may chose to trace the tab onto pattern paper, trim the paper for an exact fit, and transfer the pattern back onto the tabs) Mark tab, grind or trim as required until a proper fit is achieved. Install tab on inboard side of aft upper link bushing and secure with nut. Tack weld tab to housing, repeat on the other side.



13. Install shocks (without springs) and, using a floor jack, move the rear end through its range of travel. Make sure there is no binding or interference. Double check all dimensions. Make sure wheelbase is correct side to side. Make sure housing is square in chassis by cross-measuring. Make sure housing is centered between frame rails. Make sure pinion angle is correct.

14. Install shocks and coilovers, install wheels and tires. Lower to ground and check ride height and chassis rake.

15. When you are satisfied with the installation and measurements, disassemble all components and complete welding. Paint or plate components as desired and reassemble.



IMPORTANT

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