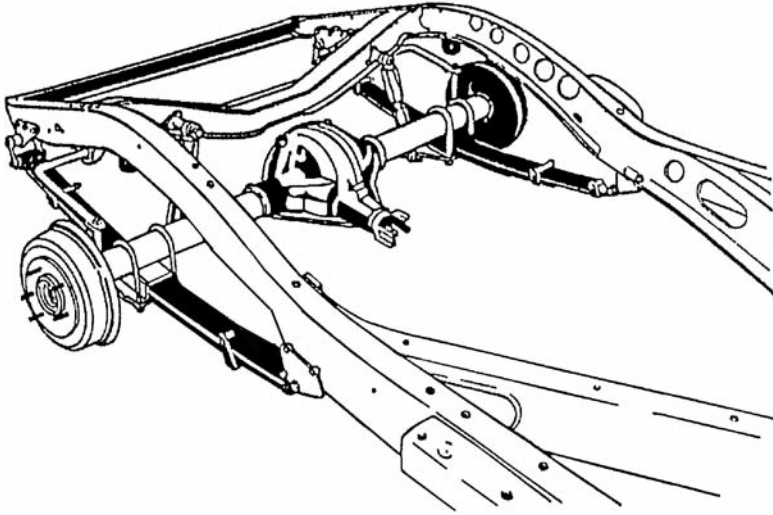


# INSTRUCTIONS

910-49942

## ULTRA TECH REAR SUSPENSION



### PLEASE READ INSTRUCTIONS COMPLETELY BEFORE STARTING YOUR INSTALLATION

This kit is designed to replace the original rear transverse spring on 1942-48 Fords with smooth riding composite fiber springs. Composite springs never sag or lose their memory.

This kit is designed to be used with the rearend from a 1968-72 Camaro or Nova for a true bolt-in installation. However, any rearend with 3" axle tubes can be used by welding on the included spring mount pads.

- 1) Support frame on jackstands and level side to side and front to back. Remove the original suspension and rear axle assembly.
- 2) The rear spring hangers mount in the existing rear bumper bolt holes. The triangular side of the hanger goes on the outside of the frame, the notched side of the hanger goes inboard and aft.
- 3) Position the spring hanger under the frame, aligning the holes with the rear bumper holes in the frame. Insert spacers between inside of frame rail and hanger. Install 3/8" bolts and secure with locknuts. Note: the bolts can be installed with the heads on the outside of the frame for a cleaner appearance, or they can be installed with the heads on the inside and the threaded shank of the bolts on the outside, providing attachment points for the bumper bracket.





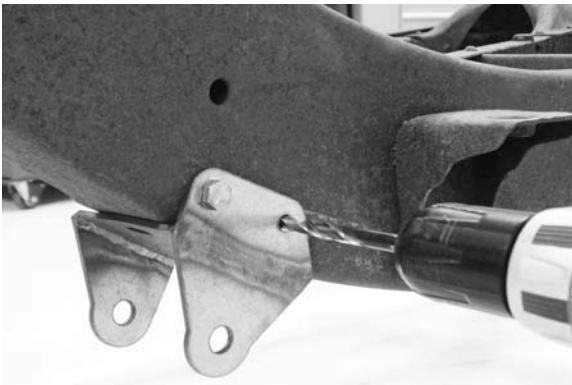
4) The front spring hangers are located using the original rivet holes on the frame. They mount where the frames X-member meets the frame rails, just forward of the rear axle arches under the frame rail. Locate the two rivets on the bottom of each rail.

**NOTE:** Remove only the forward rivet on each side, do not remove the aft rivet. Remove them by grinding off the heads and punching or drilling out the remainder of the rivets with a 5/16" drill bit.



5) Insert one of the included 5/16" bolts w/washer up through the aft slot in the spring hanger, and through the forward rivet hole in the frame rail. Secure with locknut. Position the front spring hanger squarely on the frame rail and clamp in place.

**NOTE:** To verify the proper position of the front spring hanger, measure from the center of the spring bushing hole in the front hanger to the center of the spring bushing of the rear hanger. The dimension should be  $47\frac{3}{8}$ "  $\pm$  1/8.



6) Using the holes in the spring hanger as a guide, drill the four remaining mounting holes in the frame rail with a 5/16" drill bit. Secure with bolts and lock-nuts. Repeat on the other side.



7) The leaf springs can now be installed using the supplied shackle plates and hardware. Note that the center pin of the leaf spring is not located in the middle of the spring. Install the spring with the shorter end (approximately 18 1/4" from pin to spring eye) toward the front of the car.

8) Next, you need to mock the rearend in place. Locate the 2 small bushings (1/2" ID x 5/8" OD x 3/4" long) in the hardware package. Install them onto the centering pin of the leaf springs. Position the axle pads; on the springs over the small bushings. Position the rear end housing onto the axle pads, the axle tube will retain the centering bushing when completed.



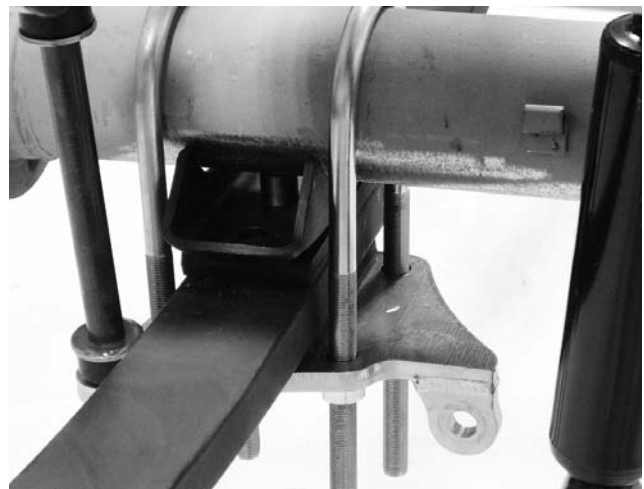
Center the housing side to side and rotate the housing to obtain the proper pinion angle (pinion angle should be the same as the crank-shaft centerline angle).

When all measurements are verified and deemed correct, tack weld the axle pads to the rearend housing on each side.

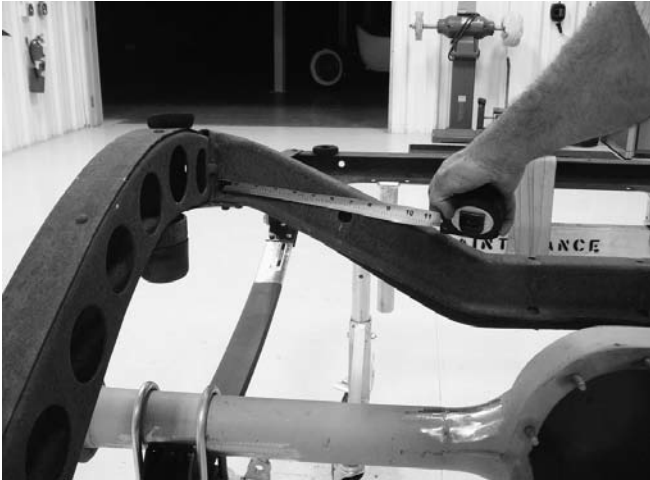


**NOTE:** Final welding should only be completed after the entire suspension has been trial fit and all dimensions verified with full weight on the chassis.

9) Install the U-bolts and lower spring plates. The spring plates should be installed with the 90 degree shock mount tab inboard, aft, and facing down. Secure spring plates with included locknuts.



## MOUNTING THE SHOCKS

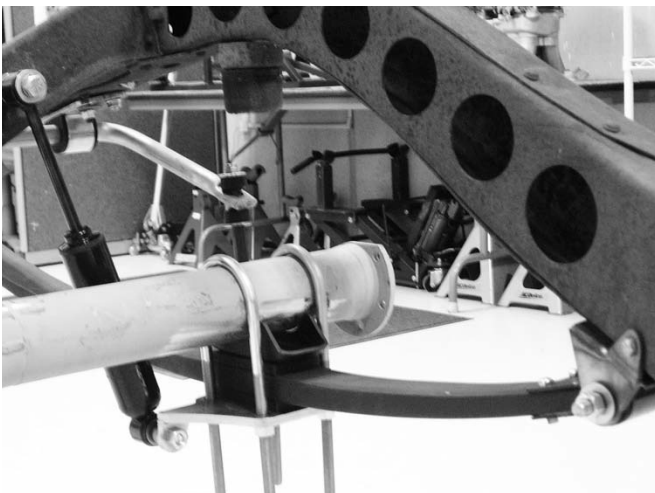


10) On most chassis there will be a pre-existing hole in the rear crossmember for the upper shock mounts. If your chassis does not have these holes, measure and drill as follows:

Measure 6  $\frac{3}{4}$ " inboard from the inside edge of the lower frame lip, and mark this location cross-member. Drill a pilot hole through the front of the cross-member and out the back side of the crossmember. Make sure to keep drill level and square to the chassis. Drill out the pilot hole on the forward side of the crossmember to  $\frac{3}{4}$ ". Drill out the pilot hole on the aft side of the cross-member to  $\frac{1}{2}$ ".



Insert the upper shock mount boss into the crossmember from the front, and secure with  $\frac{1}{2}$ " bolt, washer, and lock washer on the aft side of the crossmember.



11) Connect shock to upper shock mount with supplied hardware. Connect lower shock mount to the mount tab on the lower spring plates using the supplied hardware. Install spacer bushing between the shock and mount tab to provide adequate clearance between shock and rear axle housing.



# IMPORTANT

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