

Manufacturers and Distributors of quality chassis, suspension, driveline and components

# Ladder Bar Crossmember Instructions

These instructions are just one way of properly installing a ladder bar cross member. Depending on your fabrication experience, you may find it easier or more convenient using other methods that accomplish the same results. Every installation is slightly different, we have attempted to structure these instructions to make your installation as easy as possible.

### Part # 3718, 3719, 3818, 3819 (For use with Ladder Bar Suspensions)

Start your installation by opening all packages and check the parts you have received against the parts list.

## Parts list:

- 1...Ladder Bar Crossmember 2...3/4" x 3" Bolts
- 2...3/4 X 3 DUILS
- 2...3/4" Jam Nuts

- 4...Ladder Bar Crossmember Brackets
- 2...3/4" Nylock Nuts
- 4...3/4" Flat Washers

Before starting your installation, it is important that the car be in a location where it can remain undisturbed until the job is completed. Any flat surface, such as a garage floor is OK as long as it is flat and level. If you have access to a lift where the car can remain for the duration of the installation, it will make working under the car much easier. For the purpose of this installation, we will assume that the car has been set up in an appropriate location and the ladder bars have been installed on the rear end housing.

# INSTALLATION

**NOTE:** Installation of ladder bar crossmembers will have several factors to consider. First, it is strongly recommended and may be necessary to install sub frame connectors on uni-body cars (non-full frame). Crossmembers can be welded to the rocker panels. Sub frame connectors stiffen the chassis and provide a place to mount the ladder bar crossmember. Next, is the position of the crossmember, as to how high or low it will be in the frame rails. In some cases, the floor may have to be cut to get it in the frame high enough to attain the proper positioning. Occasionally, it may be necessary to mount the crossmember below the frame rails. This can be accomplished by fabricating a mount from box tubing that can be welded to the bottom of the frame. On high horsepower applications, additional bracing is recommended.

1. Start by setting the rear end housing, with the ladder bars preferably tack welded into place, on appropriate stands to locate the rear end housing into the proper position. Consider both the ride height and position in the wheel well opening that has been previously determined. **See Figure 1**.



## Proper Position of Crossmember-

**NOTE:** The height at which the crossmember is positioned in the frame rails determines the angle of the ladder bar and greatly determines how effective they are. For the initial set up, we recommend that the front of the ladder bar be slightly lower than the back at an angle of 4-6 degrees. The brackets must be welded with the straight front edge of the bracket vertical (90 degrees from level).

### CROSSMEMBER POSITIONING

2. Round Tube Crossmember- Find and mark the center of the dropped section of the crossmember. Slide two of the crossmember brackets over each end of the crossmember. Utilizing the center bolt hole position in the brackets, bolt the crossmember to the front of the ladder bars. Position the crossmember under the car to determine the mounting location and width. Using the centerline mark, the crossmember should be centered directly under the driveshaft. *SEE FIGURE 2.* 

**Square Tube Crossmember-** Find and mark the center of the dropped section of the crossmember. Loosely bolt the crossmember brackets, through the center hole, onto both ladder bars (one bracket on each side). Snug the nuts and bolts up enough so they stay in place. Position the ladder bars and crossmember under the car to determine the mounting location and width. Using the centerline mark, the crossmember should be centered directly under the driveshaft. **SEE FIGURE 3.** 



3. Mark the ends of the crossmember to cut off excess. Once trimmed to fit, slide assembly back into place. Tack crossmember and brackets in place. Double check to make sure everything is square, plus all angles and heights are correct. Once certain that all is correct, finish welding.