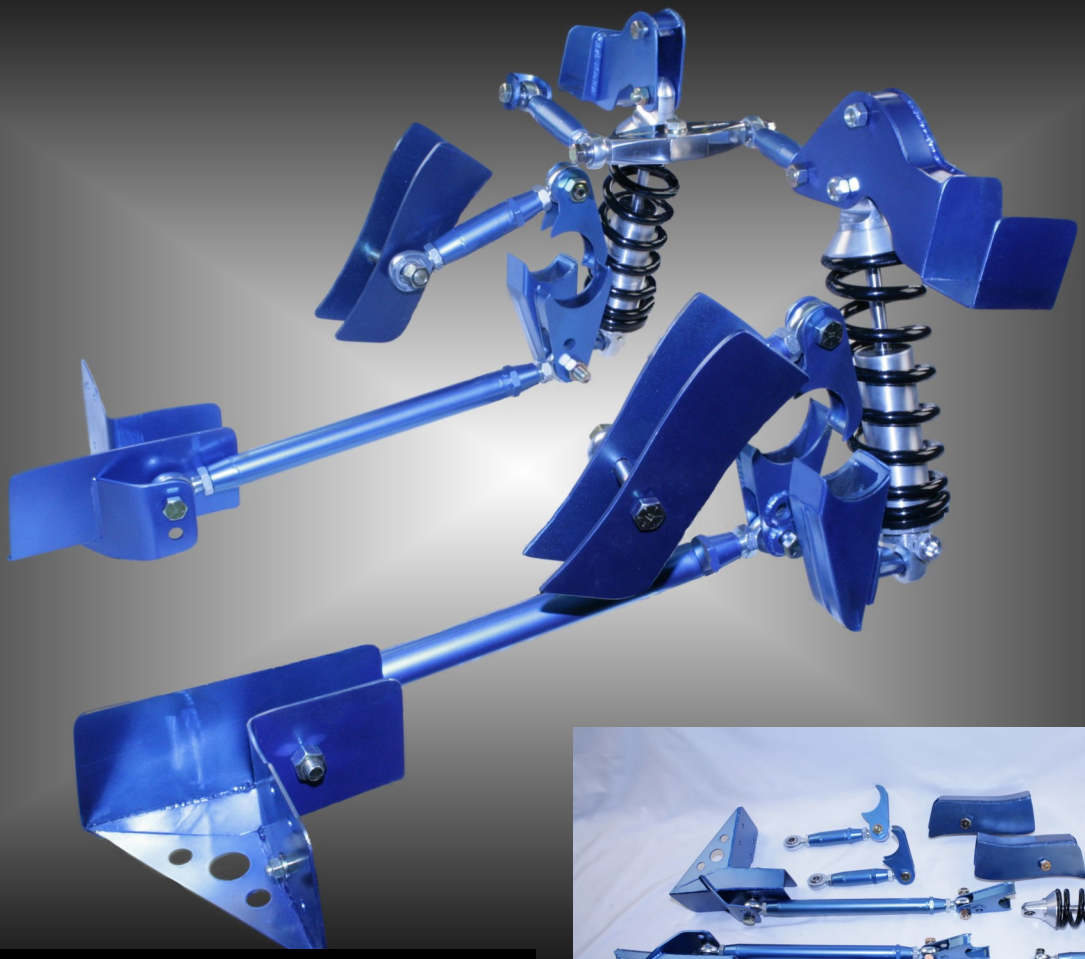
MAGNUMFORCE
RACE CAR FABRICATION INC.

Prolink Installation



MAGNUMFORCE
RACE CAR FABRICATION INC.

MFR
Prolink Installation

Please keep in mind that car chassis' vary in consistency from the factory and more variances may occur from years of hard driving, accidents and modifications throughout a car's life. That being said, you may need to do a little grinding on certain brackets in this kit. Also we have encountered some “bulging” in lower frame sections that will just need a little hammering to return it to its original shape for the saddle brackets of this kit to properly sandwich the frame.

Step 1.

Jack up the car as high as possible to give yourself plenty of room to work. Put car on stands making sure the car's rocker panels are level with the ground. Rear stands should be placed just to the inside of the front leaf spring plates to leave clearance to install the new brackets. Remove rear wheels and drop a plumb bob from the rear axle centerline to the floor and mark floor with a permanent marker or some other permanent form of marking your centerline as you will be needing this reference point after disassembly and clean up.

Step 2.

Place your jack under the rear end housing and remove the leaf spring shackles, front leaf spring plates, driveshaft, rear shocks, parking brake cable where it Ts off to rear brakes and disconnect the brake line at the rubber hose connection at the center area of the rear end housing. Next remove the rear end from the car and set it up on jack stands.

Step 3.

Strip the rear end housing of leaf springs, "U" bolts and any brackets or mounts leaving only the brake lines. A cutting torch or plasma cutter may be used but be CAREFUL not to cut into the housing. Its best to make your cuts leaving a little excess material and finishing with a grinder. (Better safe than sorry). Also make sure not to concentrate heat on any areas of the housing for extended periods of time as this can cause warpage of the housing which could lead to premature bearing ware. This is why a plasma cutter is better than a torch, but a torch is O.K if you start your cuts on brackets at a point away from the housing and move closer while your torch is cutting so you move past the areas closer to the housing faster and pointing the torch at an angle so as not to cut into the housing.

Step 4.

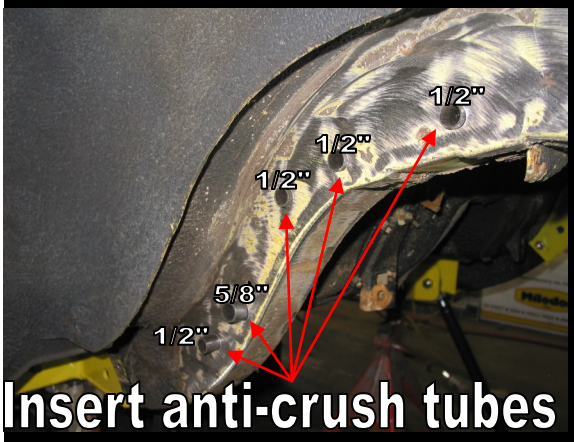
Now you need to lay out your new 4 link brackets and determine which ones go where on your car. Starting with the hardest first, take the upper shock mount brackets and test fit them into the stock upper shock mount crossmember. The top hole in the new bracket will bolt in the same location as your stock configured shock did. You may need to hammer this bracket up into the crossmember. Once in place install a 1/2" grade 8 bolt supplied with kit. Next you'll be tapping the saddle portion of the bracket onto the frame. It should be pushed as far onto the frame as possible leaving minimal space between the bracket and frame. Now drill the 3/8" hole through the frame, but just through the one side and then repeat on the other side of the frame rail. Now you can remove the bracket and paint it. Repeat the same procedure on the other side of the car. Once painted, you can install these two brackets and tighten them up.

MAGNUMFORCE
RACE CAR FABRICATION INC.

MFR
Prolink Installation

Step 5.

Take the long, curved saddle brackets with 5 holes in them and determine which side they go on by the curve and width of the frame. The upper side of these brackets will fit as close to the shock crossmember as you can get them. Now hammer the lower side of the bracket onto the frame rail again leaving as little gap as possible. Once in place, drop a plumb bob from the exact center of the 5/8" (or largest) hole in the bracket to the ground and make a mark on the floor and repeat this procedure on the other frame rail. You can now take a straight edge and make a line between these two points. Then make a straight line between the axle center line marks you drew in step 1. This will be your measuring point for your front 4-link mounting points. Now measure between your axle center line mark and the front 4-link mount mark and be sure they are the same dimension from side to side. IT IS VERY IMPORTANT that these dimensions remain the same. Once your dimensions are equal and the same height from the floor, take a 1/2" transfer punch and dimple the rails by punching through the four ½" holes in the bracket on both sides of the frame to make a pilot dimple, making sure the bracket DOES NOT move. You can now repeat this step to the other frame rail. Next, remove the brackets and drill the four holes on each side of each rail for 16 holes in all (or 8 through holes) with a 1/2" drill bit. You are drilling them larger for the anti-crush tubes that you'll be inserting through the frame. Once you have all these holes drilled and the anti-crush tubes in place and ground flush with the frame you can place the bracket back on the frame and temporarily bolt it in place. Make sure your measurements between your axle centerline are still the same and then transfer punch the larger 5/8" holes in the frame rail. Remove the bracket again and drill the punch mark you just made ending with a 3/4" hole through the frame. Install the anti-crush tube and grind flush with frame. Now you can paint and install these brackets and bolt them in with the 8- 1/2" Grade 8 bolts and lock nuts provided. You'll install the larger bolts later.



Step 6.

Now you can take your lower 4-link mount and put it into place. You may have a little more hammering here to get it into place. Once satisfied, install the 4 - 3/8" bolts to the spring plate mounting point with the bolts provided in the kit. Again repeat this procedure on the other side. Now you will need to drop your plumb bob from the lower bar mounting point center line and again MAKE SURE your measurements are equal from side to side and also the same height. When they are equal you'll transfer punch the holes remove the bracket and drill a 3/4" hole from each side of the rail. And install the anti-crush tubes, grind flush and paint and final install both brackets.

MAGNUMFORCE
RACE CAR FABRICATION INC.

MFR
Prolink Installation

step 7.

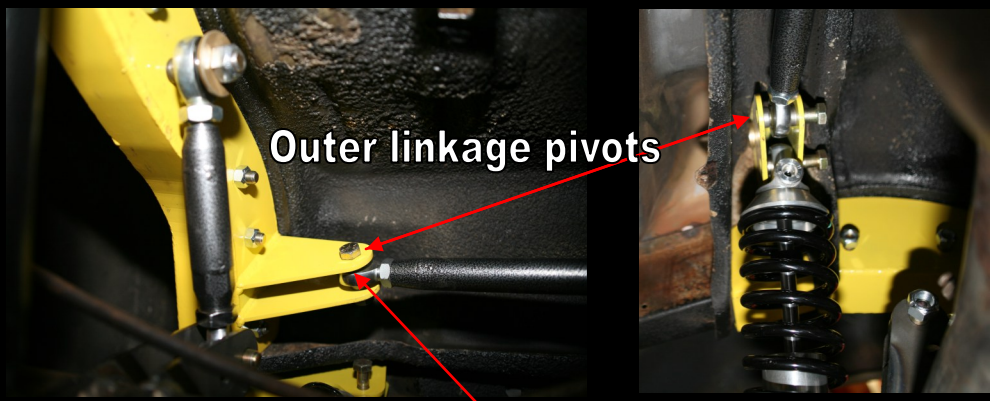
Place rear end housing under the car and determine your ride height by adjusting your stands up or down. Make sure the housing is in the proper location with the marks on the floor. (Side to side, front to back) and level. Put your shocks in the upper mounting point and secure them with the bolts, but don't tighten them as you'll be removing them again. Now you can bolt the bottom shock bracket and housing bracket to the bottom of the shock and swing it out to where it locates itself to the housing. You may need to raise or lower the placement on the adjustable housing bracket to get your desired adjustability but you want the brackets to contact the housing so that your shock is at about a 30 degree angle. This will help keep body roll to a minimum. Now you can tack or mark the placement of the bracket on the housing. Take a measurement from a point on the housing end to the bracket and copy it on the other side. Now install the 4-link bars in their front locations and install the housing mounts on them. Use the adjustment holes on the brackets to set the bottom bar at a level position with the ground and the top bar with a slight downward angle toward the front of the car. Make sure they are in a straight line from front to rear by measuring between them at both mounting points. Check all your measurements from housing end and make sure they match on both sides. When satisfied they are straight with each other and with the car you can tack them to the housing. Make good strong tacks on all four corners of these brackets so they will not move when you pull the housing out to weld it. Also make sure all brackets are plumb before welding.

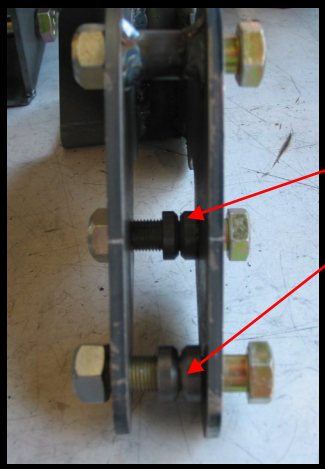
MAGNUMFORCE
RACE CAR FABRICATION INC.

MFR
Prolink Installation

Step 8.

To install the Watts link, you will find the exact center of the housing by measuring between your 4-link brackets. The mount will be welded on the top of the housing with the bars parallel to each other when the housing is in its finished position. When satisfied weld the mount, paint and assemble. On final assembly you want to maintain a pinion angle of 1 to 2 degrees down. Now you will reinstall all brake lines, cables, driveshaft and bleed brakes. Check to make sure you didn't miss anything and that all bolts are tight, install the tires and go test. For extremely low vehicles, a track locator may be used for adequate housing clearance to the stock floor pan.





MAGNUMFORCE
RACE CAR FABRICATION INC.

Prolink Subcomponents