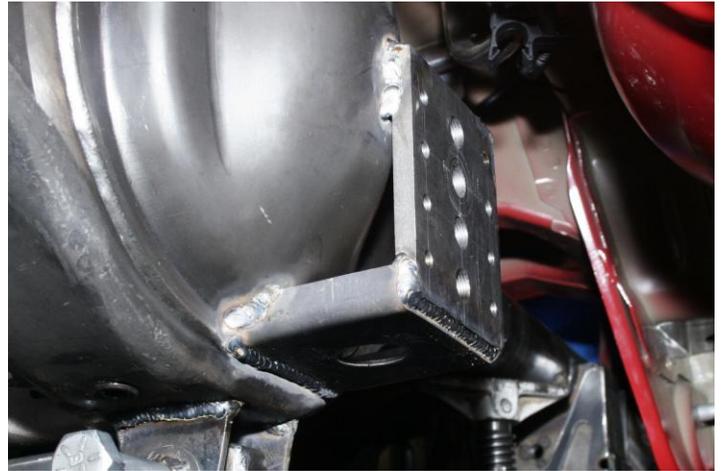


9" Watts Link Instructions

Center Section Install:

1. With chassis held level, position rear axle in car at ride height with pinion angle set and centered left to right.
2. Position main plate to rear of housing with 5/8 holes positioned in center of frame rails.
3. Tack left upper corner to banjo. With plate held at desired height. In most applications of Muscle cars and other road going, or road race vehicles, roll center height between 9 and 12 inches are the norm. This means with a 12.3" rolling radius, such as with a 315/30-18 or a 275/40-17 tire the top hole of the Watts link plate will be just below axle center line. Our experience dictates a position of 1 inch below axle center is best.
4. Use only one tack so that the plate can be flexed into proper alignment. The plate should be vertical to the ground, and parallel with the axle centerline. Fabricate from minimum 1/8 in thick material, angle iron or sheet metal stands as required to secure the plate to the axle housing. See pictures. Weld securely. Cornering loads on these welds can be high.
5. Assemble the bell crank assembly onto the plate as shown. We recommend second hole from the top as initial position.
6. **IMPORTANT: Be sure to lubricate the Delran bushings on all surfaces, inside and out with a quality anti-seize or a good high pressure synthetic lubricant.**



WARNING: When tightening center bolt be sure that bell crank has resistance to hand motion but is not locked up. Production tolerances may require you to sand either the ends of the sleeve or the shoulders of the bushings to fit snugly when lubricated and torqued. If it is loose it will wear out prematurely and may rattle. If it is too tight bind may occur affecting performance and in extreme cases damage may result.

Chassis Bracket Install

1. The sheet metal above the rear axle housing between the frame rails forward of the fuel tank has to be removed. Either fabricate a replacement piece after installation of chassis bracket, or you can use part number EMCO 2000
2. Position the Watts Chassis Bracket which can only be installed in one direction. Long pillar should be on driver's side. Clamp in place against frame rails.
3. **IMPORTANT:** Remove springs and shocks and raise rear axle, moving it all the way up and down to check for clearance between the chassis bracket diagonal cross bar and the Watts Link Bell crank Bolts. **Clearance should be 1/8" minimum.** Reposition bracket as required to fit. If you have adjustable length lower control arms, this may help you by moving the axle forward if required. Whatever is needed **do not weld in place until you have made sure you have adequate clearance.**
4. After properly sanding and prepping areas to be welded. Completely weld Watts Chassis bracket to chassis at all areas of contact.
5. Assemble and install linkage arms. Be sure to use anti-seize on the threads of the rod ends. Adjust length so bell crank is within a few degrees of straight up and down at ride height.



More pictures that may be helpful are available at this link:

<http://picasaweb.google.com/griggsracing/GriggsRacing1965GR350Mustang#>

Torque Specs:

Bell Crank	5/8 NF G8 center pivot bolt (1)	90-95 ft-lb
Stabilizer Plate	5/16 NF G8 Hex bolts through (2)	22 ft-lbs
Linkage Arms:	Bell Crank end 5/8" NF G8 (2)	90-95 ft lbs
	Chassis end 1/2" NF G8 & Nylock (2)	70-75 ft lbs

Usage/Tuning notes:

- 1) Watts Linkage Arms (rods) do not have to be perfectly level to function properly.
- 2) Raising Watts bell crank increases over steer (raises roll center).
- 3) Lowering Watts bell crank reduces over steer (lowers roll center).
- 4) On track vehicles, we establish a baseline setup initially using the second to the top hole and adjust spring rates and other chassis parameters to neutralize the handling characteristics. This way we have two positions of adjustment down, to compensate for loose or wet track conditions, and one position up for tighter conditions.
- 5) Our experience is that the bell crank pivot seldom needs attention. However it can receive very high loading and stress. We highly recommend that it be included in frequent periodic inspections for tightness of bolts and condition of bell crank bushing. If play develops in the bushings of the pivot, it may increase the possibility of failure over time. A small parts service kit is available should it be required.
- 6) The supplied rod ends are manufactured to Griggs Racing specifications with a defined preload on the balls. The balls should be tight in their housings. Our experience is the supplied rod ends can run several seasons of 20 or more road race events without needing to be replaced. However in our own racing applications we replace them yearly for good measure, and check them for play developing before every event. Field experience on street vehicles indicates rod end life span to be 30K to well over 100K miles, depending on conditions and use. **However frequent periodic inspection to determine if play is developing is recommended.**