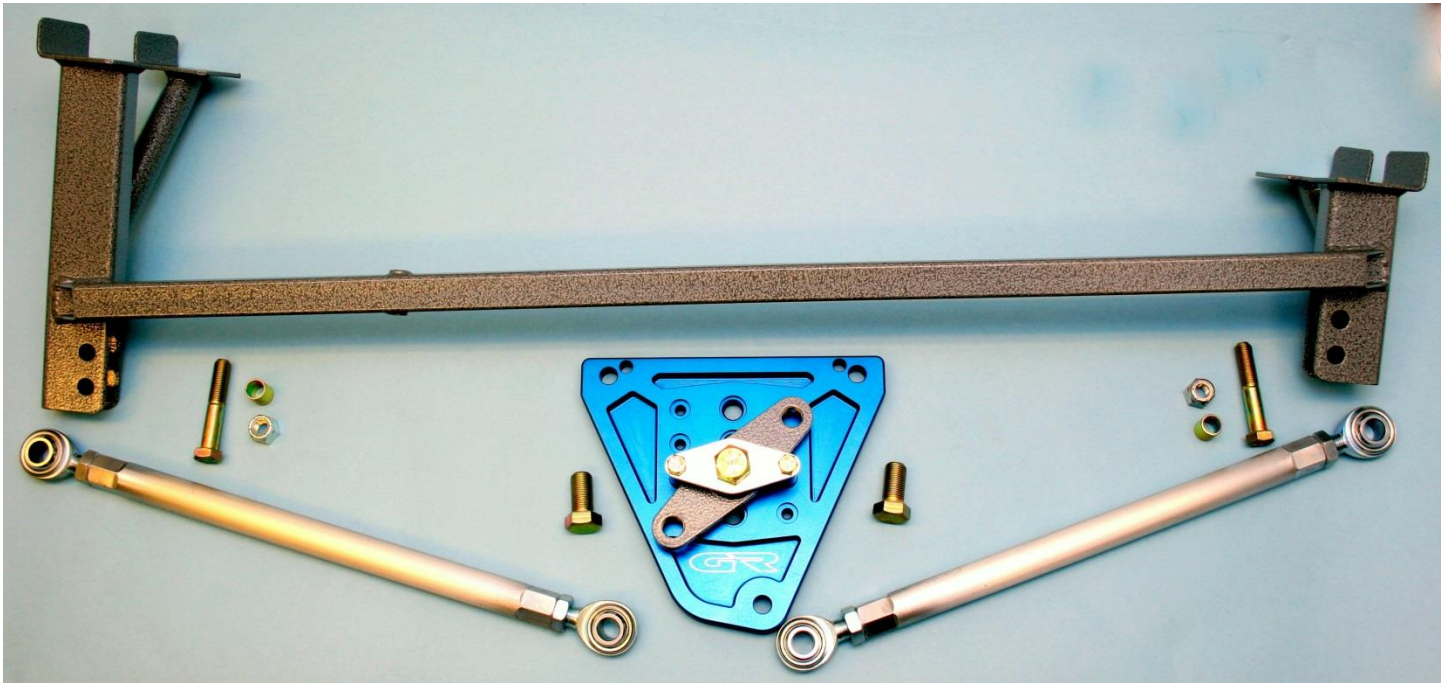


GR40 MWL 1000 Series Watts Link Installation Instructions 1979-2004 Vehicles



These instructions are written as would apply to an unmodified Mustang or one with a GR40 rear suspension system already. If your car is modified in some manner already you will have to make allowances as required. THINK and you won't have any trouble.

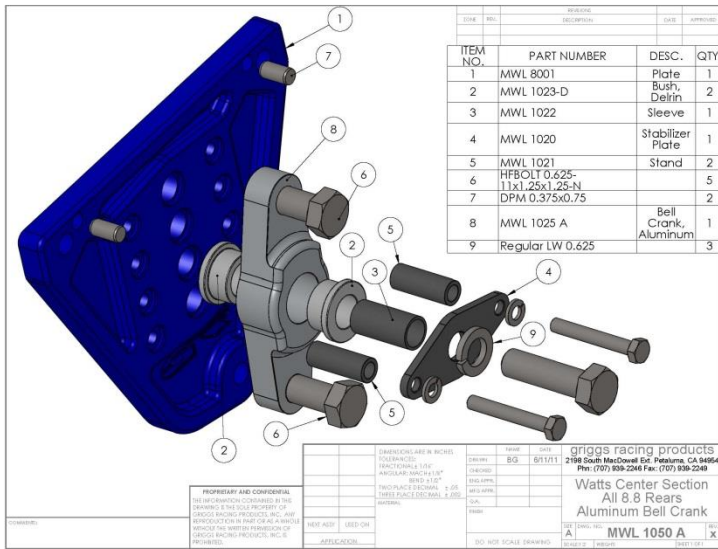
- 1) Remove rear diff cover.
- 2) Install aluminum cover, use just 4 bolts to hold in place. USE NO SEALER. This is a temporary installation at this point.
- 3) Carefully blind punch through dowel pin holes in aluminum cover into rear-end housing. Drill accurately with a good split point 3/8" (.375") bit into the housing 3/8 in deep. Be sure to hold the drill so that you don't elongate the hole in the aluminum cover.
- 4) Remove the cover, deburr the drilled holes and install the dowel pins in to the holes. They should extend 3/8" out of the housing. Tap them in if you have to.
- 5) Using a VERY SMALL AMOUNT of sealer (recommend using a 1/8" bead max), install the cover again and all bolts except for those required for TorqueArm installation.

Note, excessive sealer will not allow the cover to become "tight" to the housing and will have a greater chance of working loose or leaking.

- 6) Install TorqueArm as per instructions. Be sure you have set pinion angle as this will affect watts installation later.

7) Install the watts link Plate on to the aluminum rear cover. Tighten all bolts to proper torque. (see chart). Do not install lower mounting bolt and stud yet. Be sure drain and fill plugs in cover are tight.

8) Install Watts Link Bell Crank Assembly on to Watts Plate. We recommend starting in the second hole from the top. Tighten all Bolts to proper torque (see chart)



9) You should now be able to see how much of spare tire well must be cut out for clearance of the Watts link assembly. Clearance now as required for your requirements. If you are using GR40 Watts Cover, Part Number MWL 1201. Follow instructions for installation of that part now.



10) It is recommended that the watts link be used with Fuel Cell, Part number AR SA GR40 Race or equivalent which will provide plenty of clearance for the Watts link as well as considerable added safety. If gas tank is stock, loosen straps, and shove, or pry to rear as far as possible. Retighten straps and then fold forward flange of tank upward, taking care not to crack or otherwise damage the integrity of the tank. Cut off the forward part of the fuel tank's plastic stone guard as required for the Chassis bracket to fit in place.

11) The Watts Chassis Bracket can only be installed in one direction. Long pillar should be on driver's side. Clamp in place against frame rails.



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.**

12) After properly sanding and prepping areas to be welded. Completely weld Watts Chassis bracket to chassis at all areas of contact.

13) Fit in place (shortened if required) Watts Link Plate mounting Spud. Shorten if required. If you didn't set the pinion angle at ride height yet, you may have a problem later if you don't set it first. This spud may interfere with future pinion angle adjustments. Once fitted, prep area contact area on Torque Arm to be welded. Re-install spud again between Watts Link Plate and rear of Torque Arm and Fully Weld to TorqueArm. Paint to protect from corrosion. Torque Bolt (see chart).

14) Install Watts Link Rods, adjust both to same length with equal threads showing both ends. Center and align rear through whatever means you have available. Be sure all bolts and jam nuts are tight.

15) Be sure to fill rear axle assembly with appropriate lubricant before driving. **Fill to bottom of filler original fill hole on forward side of axle housing.**

Warning: DO NOT use the upper hole in the aluminum cover as the "Fill To" mark. If you do you will greatly overfill it and it will make a big mess when it is driven.

Notes:

- 1) Watts Linkage Rods do not have to be level, but use appropriate chassis bracket holes to minimize angularity of Watts Link Rods.
- 2) Raising Watts Bell Crank increases over steer (raises roll center)
- 3) Lowering reduces over steer (lowers roll center)
- 4) Check periodically for tightness of bolts and condition of bell crank bushing and rod ends. If excessive play develops in these parts, impact loading increases chance of failure in time. Our experience is these parts can run an entire year of 20 race events or more without needing to be replaced. We replace them yearly for good measure.
- 5) When servicing rear end remove entire cover with watts link plate and assembly attached for ease of operation. Be sure to re install using VERY LITTLE SEALANT.

TORQUE SPECIFICATIONS

Component	Fastener	QTY	Specification	Lubricant
Diff Cover:	5/16" socket head cap screws	10	22 ft lbs Anti-Sieze	Anti-Sieze
Plate:	1/2" course nuts on girdle bolts	2	MAX of 5 ft- lbs or 60 INCH-lbs	Dry
	1/2" G8 fine bottom of plate to TorqueArm	1	85-95 ft-lbs	Anti-Sieze
Bell Crank:	5/8" G8 center pivot bolt (1)	1	65-70 ft-lbs	Anti-Sieze
	5/16 G8 course bolts (2)	2	18-22 ft-lbs	Anti-Sieze
Arms:	5/8" Buton Head Socket Head Bolt Course Thread through heim ends into bell crank	2	70-75 ft lbs	Anti-Sieze
Chassis Mount:	1/2" G8 fine	2	95-100 ft lbs	Dry