



CHE PERFORMANCE PRODUCTS INSTALLATION INSTRUCTIONS

TUBULAR WATTS LINK BARS PART # CHE14U

**2003-2004 Mercury Marauder
2003-Present Ford Crown Victoria**

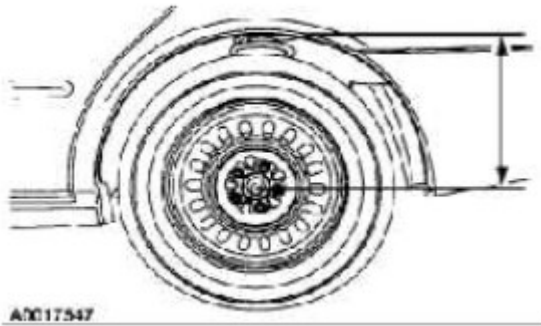
Kit Contents:

2ea. Watts Link Bars
1ea. Assembly Lube Vial
1ea. Applicator Brush

WARNING!!: If you lack the necessary skill, tools, or equipment to safely complete this installation, have the component installed by a mechanic with the proper equipment and expertise.

Thoroughly read and understand these installation instructions before beginning the installation. If there is any doubt regarding the procedure, please contact CHE Performance prior to attempting installation

Step 1. Document Ride Height



For Air Ride equipped vehicles:

For reference after the installation procedure, measure the distance from the lip of the fender to the center of the wheel hub with the vehicle in static level ground position. Do this on both sides of the vehicle and note the dimensions.

Step 2. Raise the Vehicle

WARNING: The electrical power to the air suspension system must be turned off prior to hoisting, jacking or towing an air suspension vehicle. Failure to do so can result in unexpected inflation or deflation of the air springs, which can result in shifting of the vehicle during these operations. Turn the air suspension service switch off

With the front wheels properly blocked; raise the rear end of the vehicle as high as safely possible. Place jack stands on a solid area under the frame of the car, not the rear end. Remove the wheels at this time.

Step 3. Support Rear Axle

Place jack stands securely under the axle for support. If the axle is supported independently of the vehicle, it will help to prevent the rear from shifting during the installation process. Do this with the axle at its lowest possible position to provide as much working room as possible but still have enough weight on the jackstands to prevent the axle from moving laterally.

Step 4. Remove Ride Height Sensor



For Air Ride Equipped Vehicles:

Remove the ride height sensor armature from the watts link bar on the driver side. Using a suitable prying tool, the armature should pop off of the bracket without much force.

DO NOT REMOVE THE BRACKET FROM THE WATTS LINK AT THIS TIME. The sensor bracket will be transferred to the new arm in a later step.

Step 5. Remove Frame Bolts



NOTE: Prior to removal of the links from the vehicle, note which direction the curvature of the arms are when installed. It is important that the new arms are oriented in the same direction to prevent suspension damage.

Remove the bolts that attach the bars to the frame. Remove both driver's and passenger side bolts. Retain the hardware for re-installation.

Take care removing the passenger side bolt on air ride suspension cars as the air bag will need to be maneuvered out of the way to clear the bolt.

Step 6. Remove Watts Links



Loosen the nuts that hold the watts bars to the center pivot. Once that is completed, remove the center nut holding the pivot to the differential. If the stud starts to turn while removing the nut, loosen the stud enough until you can hold onto the stud's hex with a wrench.



Remove the parking brake cable retainer from the driver side. Once the cable is moved out of the way, you can remove the entire pivot off of the stud making it easier to remove the bars from the pivot. If possible, remove the entire assembly from the vehicle to aid in watts link removal from the bellcrank pivot.

Remove the watts link bars from the bellcrank.

Step 7. Transfer Ride Height Sensor



Note: The watts bars are identical from left to right and can be placed on either side of the vehicle.

For vehicles with air ride suspension:

Select one of the new watts link bars to be the driver side. The easiest way to align the ride height sensor is to place the stock bar over top of the new one and use a marker or chalk to outline the location of the sensor bracket onto the new arm. Keep in mind that the slots are offset from the center line so make sure the orientation of the slots are the same (this is displayed in the picture with the arms in reversed position to demonstrate the offset). Install the sensor on the new link using the marks you made as a guide.

Step 8. Install Watts Links



Apply a light coat of the supplied assembly lube to the faces of all bushings prior to installation.



Install the watts links. Start by sliding the bars onto the pivot first, then put the pivot back onto the stud. This can be done outside of the vehicle.

Note: The links are installed bowed side up on the driver's side, bowed side down on the passenger side.

IMPORTANT: If the pivot stud came loose during removal of the nut, it must be properly torqued before installing the watts link assembly. The stud should be torqued to 199 lb-ft

Step 9. Torque Pivot Arm Fasteners



Unlike the factory bushings, the bushings in the new links are free to rotate around the mounting bolt, allowing the bolts to be fully torqued without the vehicle at ride height.

Install the nut on the pivot stud and torque the nut to 184 lb-ft.

The fasteners attaching the watts links to the pivot arm should be torqued to 68 lb-ft.

Step 10. Install Passenger Side Frame Bolt



Install the watts link to frame bolt on the passenger side. On vehicle with air ride suspension, you will need to maneuver the bolt and air spring to get it installed. **DO NOT** install the bolt with the nut on the air spring side or it will rub the spring.

Torque the fastener to 76 lb-ft

Step 11. Install Driver Side Frame Bolt



Install the watts link to frame bolt on the driver side. If the rear end shifted during the installation process, you may need to pry it to the side to get this bolt lined up.

On vehicles with air ride, pop the ride height sensor armature onto the bracket.

Torque the fastener to 76 lb-ft

Step 12. Adjust Ride Height Sensor

Once all the fasteners have been torqued properly, lower the car and turn on the air suspension switch. Turn the ignition on, after a few second the suspension should level itself. At this point the reference height measurement you took at the beginning will be used. Take a new measurement and compare the two. If the measurements are not the same, you will need to loosen the sensor bracket on the watts link and slide it in the proper direction. Moving the bracket toward the center of the car lowers, moving it outboard will raise it.

Important: make sure the air suspension switch is turned off prior to raising the vehicle to make adjustments of the sensor bracket.

Note: After activation of the suspension, the car may not sit perfectly level from passenger to driver side. If this happens, you will need to completely deflate the air springs before making your final adjustments.

Step 13. Inspect Installation

Fully inspect the installation ensuring that the suspension is free to travel and that all fasteners have been properly installed and torqued.

Step 14. Lower vehicle

Lower the vehicle and perform a road test.

Questions, Comments, Suggestions?

If you have any questions, comments, or suggestions regarding these instructions or product, please do not hesitate to contact us immediately. Thank you, and enjoy your new CHE Performance Product.

Technical Support/Contact Information

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