

# INSTALLATION INSTRUCTIONS



## DOUBLE ADJUSTABLE UPPER CONTROL ARM SET

PART # CHE2B, CHE2C, CHE2G, CHE2H

*Use caution and common sense while working on the vehicle. If you lack the necessary equipment or expertise to perform this operation, have the Control Arms installed by a mechanic with the proper tools and experience. Failure to follow safe practices may result in injury.*

**If you are installing lower control arms with the uppers, it is recommended to install the lowers first.**

- 1. Raise the vehicle-** With the front wheels properly blocked and a jack placed under the rear differential; 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.
  - a. Tip:** Place the jack stands slightly forward of the control arm mounting bolt or on the mounting plate of the subframe connectors if you have them.
- 2. Raise rear end-** Using a floor jack under the center section of the rear end, raise the rear axle of the vehicle until the rear axle is supported by the jack and the shocks are not topped out (approximately 2 inches). The rear axle of the vehicle should not be carrying the full weight of the vehicle.
- 3. Support rear end-** Place jack stands securely under the axle for support.

**Note: to ease installation, only work on one side at a time**

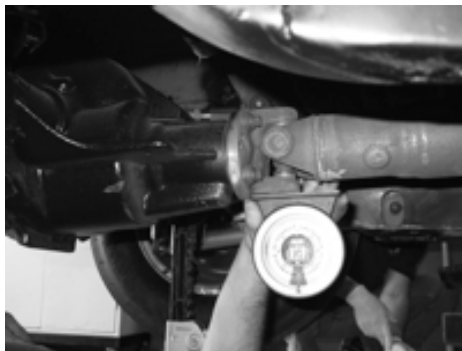
- 4. Remove mounting bolts-** Remove the 2 control arm mounting nuts and bolts securing the stock control arm.
- 5. Remove control arm-** Remove the control arm from the vehicle.
- 6. Clean & inspect mounting points-** Fully inspect all mounting points and remove any debris. Apply a light coating of the supplied synthetic grease to all surfaces that will be in contact with the bushings. At this time, also coat the outside of the bushings themselves with the same supplied grease.
- 7. Install control arm-** Install the new control arm using the reverse procedure of removal.
  - a. Tip:** Because the new Polyurethane bushings are much firmer than the stock rubber, it may be necessary to gently persuade the control arm into the mount using a rubber mallet or other suitable tool, taking care not to damage the finish. It may also be helpful to place the jack under the front of the differential, just behind the driveshaft flange if the axle has rotated during disassembly.
- 8. Tighten hardware-** At this time; tighten both mounting bolts to 70-80 lb-ft.
- 9. Install 2<sup>nd</sup> control arm-** repeat this procedure for the other side.
- 10. Adjust Pinion Angle-** Your new control arms are pre-set at the factory length. If you need to adjust your pinion angle from stock, please follow the instructions on the back. Before setting the pinion angle, both control arms should be installed.
- 11. Inspect installation-** Inspect the installation, insuring that suspension is free to travel. At this time, install the wheels and lower the vehicle.

## Follow these steps to adjust the pinion angle after installation of both of the adjustable upper control arms.

- A. **Level car-** To properly set the pinion angle, the vehicle must be level both front to back and side to side. The vehicle **must** be properly supported at the wheels and be sitting at ride height
  - a. **Tip-** Automotive ramps under the front tires and jack stands under the rear axle is recommended.
- B. **Loosen jam nuts-** Loosen the 2 jam nuts on each of the control arms.
- C. **Mark starting point-** To properly set the pinion angle, both control arms must be the same length or undesirable effects will occur. To assist in ensuring both arms are equal, mark the double adjuster with a marker to establish a reference.



- D. **Set pinion angle-** Turn the double adjusters in full revolutions (using the mark as a reference) until the proper pinion angle is achieved. There is no recommended angle, although 2-4 degrees down is a good starting range.



The pinion angle is the difference in angle between the pinion gear in the axle housing and the driveshaft.

The pinion angle is determined by subtracting the angle of the pinion from horizontal from the angle of the driveshaft from horizontal.

Although there are a number of dedicated devices available for checking pinion angle, a simple angle finder available at most hardware stores will perform this task sufficiently.



The pinion gear angle can be measured from any surface that is either exactly parallel or exactly perpendicular to the pinion, such as the pinion flange or a bearing cap.

The driveshaft angle is simply measured directly from the driveshaft.

Subtract the 2 angles to arrive at the pinion angle.

- E. **Tighten jam nuts-** Tighten the jam nuts on both control arms. If you have the rod end (heim joint) control arms, make sure that the rod end is in proper alignment and not twisted or suspension binding or damage may occur.

If you require technical assistance, please contact our technical support team via e-mail at: [support@cheperformance.com](mailto:support@cheperformance.com)

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