

# RSK469 – G-Body Rear Suspension Kit (TCA039, UTCA055, RB003, BK044, RH003)

NOTE: When performing this installation it is recommended to do one side at a time. Removing both lower control arms at the same time allows the rear end to shift making installation more difficult.

# Rear Lower Control Arm (TCA039) Installation:

- 1. Lift vehicle and support with jack stands under the frame rails.
- 2. If equipped, remove all 4 sway bar bolts and remove the sway bar.
- 3. Remove both bolts from one control arm and remove the arm.
- 4. Clean the bushing mounting surfaces in the frame. Lube the outside of the bushings using a silicone based polyurethane lube.
- 5. Install the new control arm but do not tighten the bolts. Repeat steps 3-5 for the other side.
- 6. Once both new control arms are installed and bolts are finger tight, load the rear suspension by placing the jack stands under the axle. It is necessary when using polyurethane bushings to properly load the bushings before tightening the mounting bolts. **NOTE:** tightening the control arm bolts with the rear end hanging results in bushing preload and can cause irregular ride height and premature bushing wear.
- 7. Tighten bolts to 80 ft/lbs.
- 8. Re-install the sway bar.
- 9. Using a grease gun with a silicone based polyurethane lube, lube each grease fitting with 4-5 pumps. For maximum longevity, re-grease at 500 miles and then every other oil change.
- 10. Lower vehicle.





## Rear Upper Control Arm (TCA055) Installation:

- 1. Lift vehicle and support with jack stands under the frame rails.
- 2. Unbolt both bottom shock mounts. Using a jack, lower the rear end being careful not to damage the rubber brake line.
- **3.** If equipped, remove the differential vent line bracket.
- 4. Remove all 4 bolts from the control arms and remove both control arms.
- 5. If you are using new polyurethane differential bushings, spray the factory bushings with penetrating oil and drive them out with a hammer or air punch (Some cars may require professional installation for this bushing but most will come out with a little patience). Once the bushings are out, clean and lube the bushing holes and drive the new bushings into place. Grease the outer mounting surfaces of the bushings.
- 6. Install the new upper control arms and leave the bolts finger tight. If using the adjustable control arms, adjust them to the factory length, using the factory control arms as a guide. Once adjusted to the proper length, tighten the adjuster jam nuts.

**NOTE:** Loctite blue is recommended to prevent the jam-nuts from loosening. Loose jam-nuts can cause automatic adjustment and will also wear out the threads on the adjuster and the threaded inserts.

- 7. Lift rear end, attach lower shock bolts and tighten.
- 8. Support the car by the rear end to properly load the polyurethane bushings and tighten all bolts.

**NOTE:** tightening the control arm bolts with the rear end hanging results in bushing preload and can cause irregular ride height and premature bushing wear.

- 9. Torque all four bolts to 80 ft./lbs.
- **10.** Using a grease gun with a silicone based polyurethane lube, lube each grease fitting with 3-4 pumps. For maximum longevity, re-grease at 500 miles and then every other oil change.





# Rear Control Arm Chassis Brace (RB003) Installation:

NOTE: To prevent bushing pre-load during re-assembly, a 4-post service lift is recommended to keep the suspension loaded during installation. Alternatively, the installation can be performed on jack stands if the rear springs are removed and the rear end raised to ride height during the installation process. Both variations are included in these instructions.

- 1. If you are using a drive-on service lift, skip steps 2-5.
- 2. Lift vehicle and support with jack stands under the frame rails.
- 3. Place a jack under the differential so that it may be raised up and down for ease of installation.
- 4. Unbolt the lower shock mount and lower the rear end. Remove both springs.
- 5. Once the springs are removed, lift the rear end to the standard ride height.
- Remove the front bolt from one of the upper control arms and replace it with one of the supplied longer bolts. Allow only a portion of the thread to protrude through the frame rail and do not install the nut.
- 7. Repeat this procedure for the front bolt on the lower control arm except push the bolt all the way through the frame. Insert one of the supplied thick washers onto the protruding bolt on the lower mount.
- 8. Install the BMR mount brace onto the protruding bolts. Once it is over the bolts, push the upper bolt through the mount brace.
- 9. Place a washer and poly-lock nut over the bolts and tighten to 85 ft/lbs.
- 10. Repeat steps 4-9 for the other side then lower the vehicle.







## Rear Control Arm Chassis Brace (RB003) Installation:

- 1. Lift the vehicle and safely support the body with jack stands under the frame rails, allowing the rear end to drop as far as possible.
- 2. Place a hydraulic jack under the axle. Removing the wheels/tires is optional but will allow you to lower the rear end further and give more workspace as well.
- 3. Remove the upper control arm bolts at the axle then pivot the control arms up, out of the work area.
- 4. Unbolt the lower shock mounting bolts, allowing the rear end to droop further.
- 5. The images below show tools designed specifically for removing and installing the axle bushings. There are also various other ways to accomplish the same thing. If you don't have a tool, you can "core the bushing" by drilling multiple holes in the rubber portion then knocking the outer steel sleeve out of the rear end with a dead blow hammer. It is also possible to burn the rubber out of the bushing using a torch. *NOTE:* for part number BK043, DO NOT destroy the outer steel sleeve. The other sleeve gets re-used for this part number.



- 6. Once the bushings have been removed from the rear end, clean the housing bores with steel wool or sand paper to remove any rust and scale in the mounting holes.
- 7. If you have any of the tools shown above, install the BMR bushings into the housing. If you do not have any of these tools the bushings may be installed by the following method: knock the center sleeve out of the bushing using a punch and a hammer. Now push the polyurethane bushing out of the outer steel sleeve. Knock the outer steel sleeve into the housing using a dead blow hammer or a regular hammer with a block of wood (IMAGE 1). The sleeve is positioned properly once the stepped portion of the sleeve bottoms out on the ear of the rear end. Now re-install the polyurethane bushing and center sleeve. The outer polyurethane "rings" go over the smaller portion of the bushing once it has been installed. NOTE: on some axle housings the body of the housing is too large to allow the use of this ring.
- 8. Lube the bushing mounting surfaces using the supplied grease.
- 9. Lift the rear end and re-install the shocks.
- 10. Re-install the upper control arms then lower the vehicle.

