

RSK309 - Rear Suspension Kit For 15" Conversion Kit

2008-2009 Pontiac G8, and 2014 – 2017 Chevy SS

Note: If you are using the BMR brake kit (DRP300 – DRP303), some vehicles will require the use of the provided caliper spacer and caliper bolts to achieve the correct caliper and rotor spacing.

TOOLS REQUIRED:

- Hydraulic Jack and Jack stands
- 3/8" drive ratchet
- Wrenches: 15 mm, 18 mm, (x2) 21 mm, 5 mm Allen wrench
- Sockets: 18 mm socket, 21 mm
- 1" wrench
- Torque wrench

INSTALLATION:

- 1. Lift the vehicle until the wheels are off the ground. Support the vehicle with jack stands underneath the frame rail.
- 2. Remove the rear wheels from the car.

NOTE: Installation of the trailing arms is much more straightforward with the wheels/tires removed; however, it is not necessary to do so.

3. Start disassembling the outer trailing arm bolt. Hold the nut with an <u>18 mm wrench</u> and loosen the bolt using an <u>18 mm socket</u>. See FIGURE 1



WWW.BMRSUSPENSION.COM



- 4. Using an **<u>18 mm socket</u>**, loosen the inner trailing arm bolt on the chassis side.
- 5. Remove both bolts and remove the trailing arm.

NOTE: The outer bolt can only be removed if the suspension is in the full droop position.

- 6. Use the stock arm to adjust the BMR Trailing Arm to the OE length.
- 7. Install the BMR trailing arm back into the original position and insert the bolts. See FIGURE 2



- 8. Torque the inner and outer trailing arm bolts to 80 ft-lbs using an 18 mm socket.
- 9. Repeat steps 2-7 on the opposite side.
- 10. Tighten the $\frac{3}{4}$ jam nut on the rod end using a <u>**1**</u> wrench.

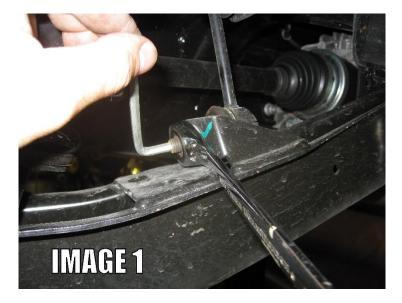
WWW.BMRSUSPENSION.COM

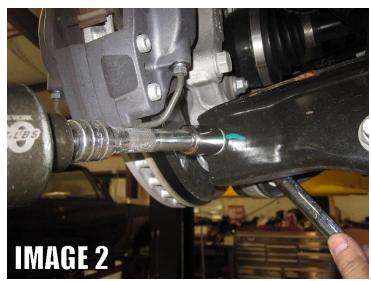


LOWER CONTROL ARM INSTALLATION:

- 1. Mark your eccentric bolt using a marker or paint pen to keep your car's factory settings. **IMAGE 0**
- 2. Using a <u>15 mm wrench</u> and a <u>5 mm Allen wrench</u>, remove the nut on the sway bar end links as shown in **IMAGE 1**.
- 3. Next, remove the outer control arm bolt using an <u>18 mm</u> socket and an <u>18 mm wrench</u>. See IMAGE 2







WWW.BMRSUSPENSION.COM



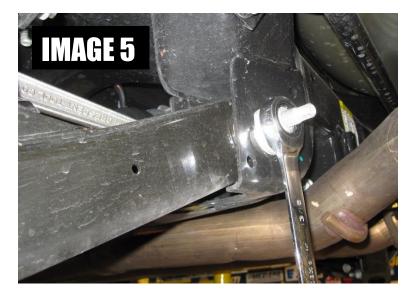
 Remove the lower control arm shock cross-bolt using a <u>21 mm wrench</u> and <u>21 mm socket</u>, as seen in IMAGE 3.

NOTE: While removing the control arm at this point is possible, loosening the (4) upper shock mounts using a **<u>15 mm socket</u>** is easier. This releases the shock tension, and the control arm will come out much easier. **IMAGE 4**





- Using (2) 21 mm wrenches, remove the chassis side lower control arm bolt. See IMAGE 5
- 6. Remove the OE control arm from the vehicle.



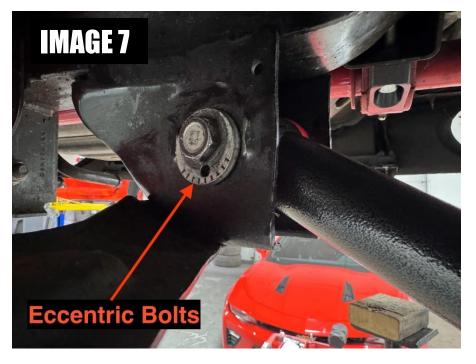
WWW.BMRSUSPENSION.COM



2008-2009 Pontiac G8, and 2014 – 2017 Chevy SS

- 7. Install the BMR control arm and insert all the appropriate bolts on the inner and outer of the control arm, but do not tighten them yet. **IMAGE 6**
- Install the lower control arm shock bolt and torque to 148 ftlbs using a <u>21 mm socket</u>. Then, torque the (4) upper shock mount bolts using a <u>15 mm</u> <u>socket</u> to 43 ft-lbs. IMAGE 6 & 4
- Using the mark you made before you started, line up the two marks drawn on the chassis and the eccentric bolt. IMAGE 7 & 0
- 10. Once the marks line up, torque the outer control arm bolt to 93 ft-lbs using an <u>18 mm socket</u> and the inner control arm bolt to 85 ft-lbs using a <u>21 mm socket and wrench</u>.





WWW.BMRSUSPENSION.COM



RSK309 - Rear Suspension Kit For 15" Conversion Kit

2008-2009 Pontiac G8, and 2014 – 2017 Chevy SS

11. Install the end link bolt back into the lower control arm and torque to (**40 ft-lbs for <u>ELK006</u>**) and **(35 ft-lbs for ELK356**). See **IMAGE 8**



Note: If you are installing a 15-inch conversion caliper, some vehicles will require a caliper spacer and bolts. Once the caliper and rotor are installed, ensure that the rotor can free-spin without interfering with the caliper.

- 12. Replace the rear wheels and lower the vehicle.
- 13. Take the car to a reputable alignment shop for a 4-wheel alignment.

STREET/STRIP PERFORMANCE	PRO PERFORMANCE
Front camber:2 to6 max degrees	Front camber:2 to6 max degrees
Rear camber: 0 to +.4 degrees	Rear camber: +.4 to +1 degrees
Front toe: -1/16"	Front toe: -1/16"
Rear toe: -1/16"	Rear toe: -1/16"
Front caster: 7 to 8.5 (OE not adjustable)	Front caster: 7 to 8.5 (OE not adjustable)

BMR recommends the following alignment specs:

Note when adjusting the length of your Adjustable Trailing Arms:

For aggressive alignment settings, altering the length of the various arms that make up your suspension may be necessary. Lengthening or shortening one arm often requires the user to do the same to the other arms in the suspension to prevent binding or achieve a desired alignment specification. BMR offers adjustable versions of its Trailing Arms, Lower Control Arms, and Toe Rods.

WWW.BMRSUSPENSION.COM