AAK464 A Arm Kit Installation Instructions

UPPER A ARM ADJUSTMENT INSTRUCTIONS:

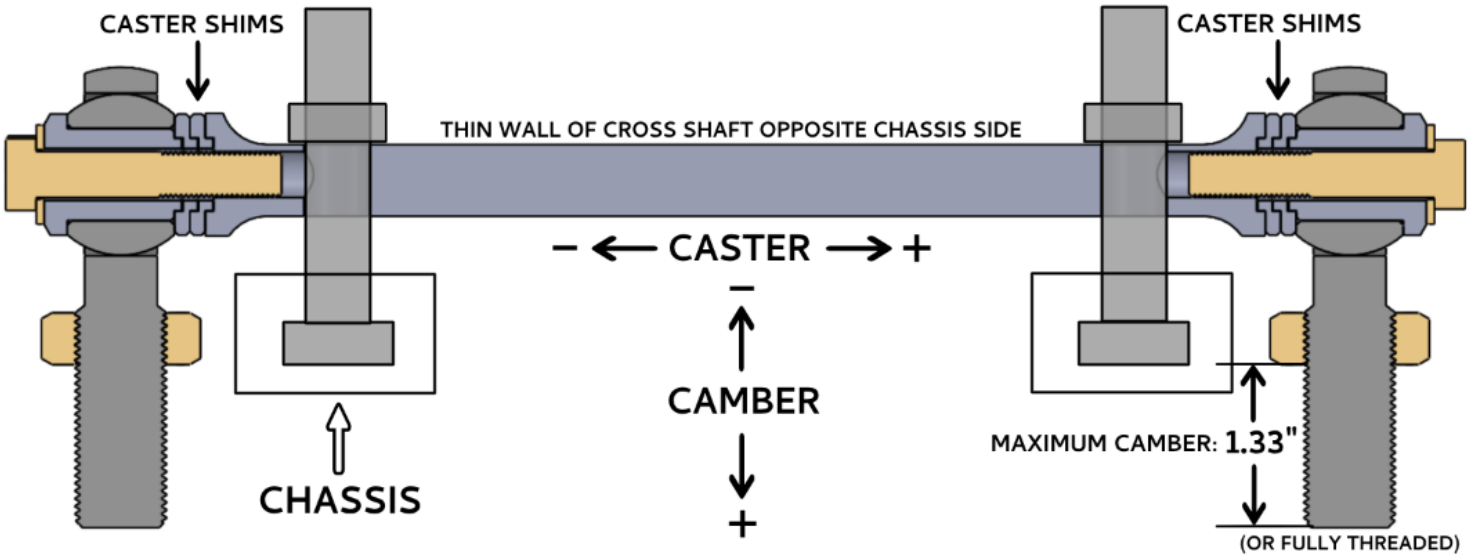
Camber adjustment is achievable by adjusting the jam nuts on the rod end. **Moving the jam nuts closer to the cross shaft yields increased negative camber**. Fine tuning of the camber adjustment is possible by reversing the installation direction of the cross shaft. Caster adjustment is achievable by moving the shims on the ends of the cross shaft to the desired side**. Increasing the number of shims on the rear of the shaft yields increased positive caster.** The following images show some (but not all) possible caster/camber configurations.

Important note: The adjustment configuration that you select during installation should be used only as a "bias" towards the alignment setup that you want for your car. Your final alignment setup will be slightly different and should be fine-tuned at an alignment shop after installation.

Caster: Neutral **Camber: Maximum (Most negative)**

Notes:

- In this configuration, there are two caster shims on each end of the cross shaft.
- Maximum camber adjustment is achieved when the jam nut is fully threaded to the top of the rod end, or at **1.33"** from the **bottom of the nut** to the **bottom of the rod end**. For additional camber, install the cross shaft with the thin wall opposite the chassis side.



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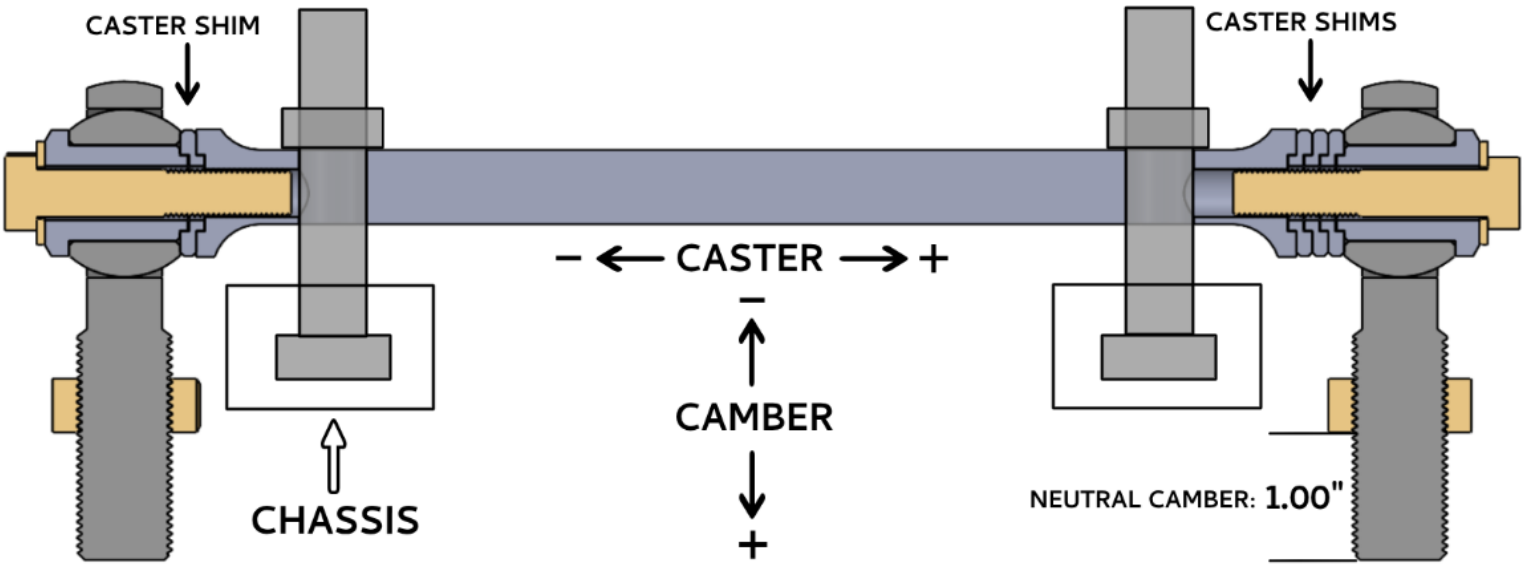
Caster: Positive **Camber: Neutral**

Notes:

- In this configuration, there are three caster shims on the right of the cross shaft and one caster shim on the left of the cross shaft.
- Neutral camber adjustment is achieved when the bottom of the jam nut is **1.00”** from the **bottom of the nut** to the **bottom of the rod end**.

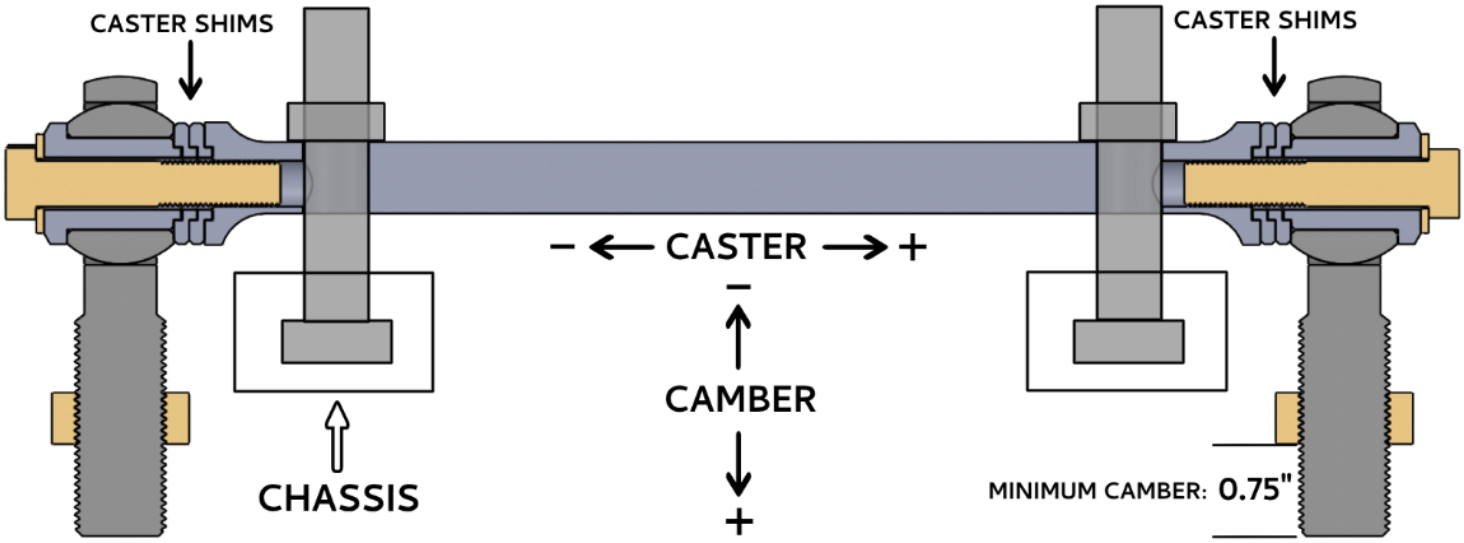


AAK464 A Arm Kit Installation Instructions

Caster: Neutral **Camber: Minimum (Most positive)**

Notes:

- In this configuration, there are two caster shims on each end of the cross shaft.
- Minimum camber adjustment is achieved when the bottom of the jam nut is 0.75” from the **bottom of the nut** to the **bottom of the rod end**.
- **FOR SAFETY REASONS, DO NOT INSTALL THE JAM NUT LESS THAN 0.75 INCHES ABOVE THE BOTTOM OF THE ROD END.**

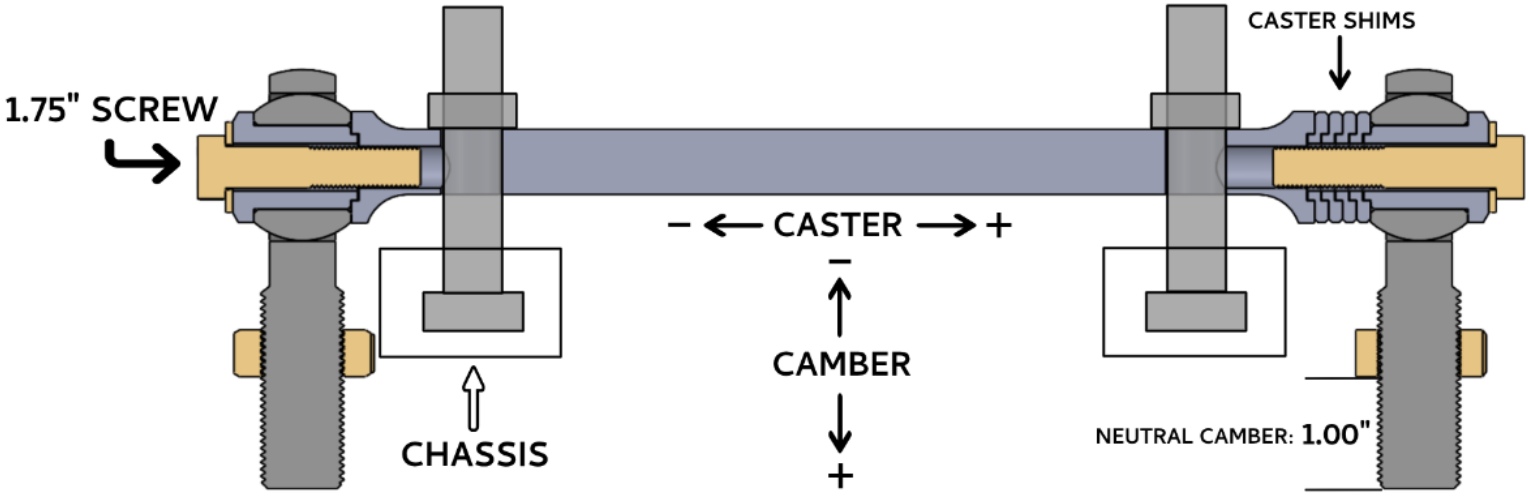


AAK464 A Arm Kit Installation Instructions

Caster: Maximum (Most positive) **Camber: Neutral**

Notes:

- In this configuration, there are zero caster shims on the left end of the cross shaft and four caster shims on the right end of the cross shaft.
- To allow clearance for the installation bolt, installation of the included 1.75” yellow zinc plated screw is required.
- Neutral camber adjustment is achieved when the bottom of the jam nut is **1.00”** from the **bottom of the nut** to the **bottom of the rod end**.



AAK464 A Arm Kit Installation Instructions

UPPER A ARM INSTALLATION:

1. Lift vehicle and support safely with stands under the frame rails. Remove the wheels and tires.

2. Beginning with one side of the vehicle, turn the wheels to allow access to the castle nut on the upper ball joint.

3. Place a hydraulic floor jack under the lower A-arm and lift slightly to relieve the spring tension from the ball joint.

4. Remove the cotter pin then loosen the castle nut but do not remove it. Using a brass hammer, hit the spindle around the ball joint mounting hole until the ball joint pops loose.

   NOTE: *A pickle fork may also be used to loosen the ball joint.*

5. Remove the castle nut then pivot the A-arm upward until the ball joint comes out of the spindle.

6. Remove the two nuts that attach the A-arm to the sub-frame. Remove the shims located between the A-arm cross-shaft and the sub-frame and set aside in proper order for re-assembly. Slide the A-arm towards the motor until the cross-shaft clears the mounting studs and remove the A-arm.

   NOTE: *In some instances, aftermarket headers may need to be removed in order to remove and install the upper A-arms.*

7. Install the BMR upper A-arms over the studs using the original shims. Tighten the nuts.

8. Pivot the A-arm down until the ball joint goes through the spindle. Tighten the castle nut and install a new cotter pin.

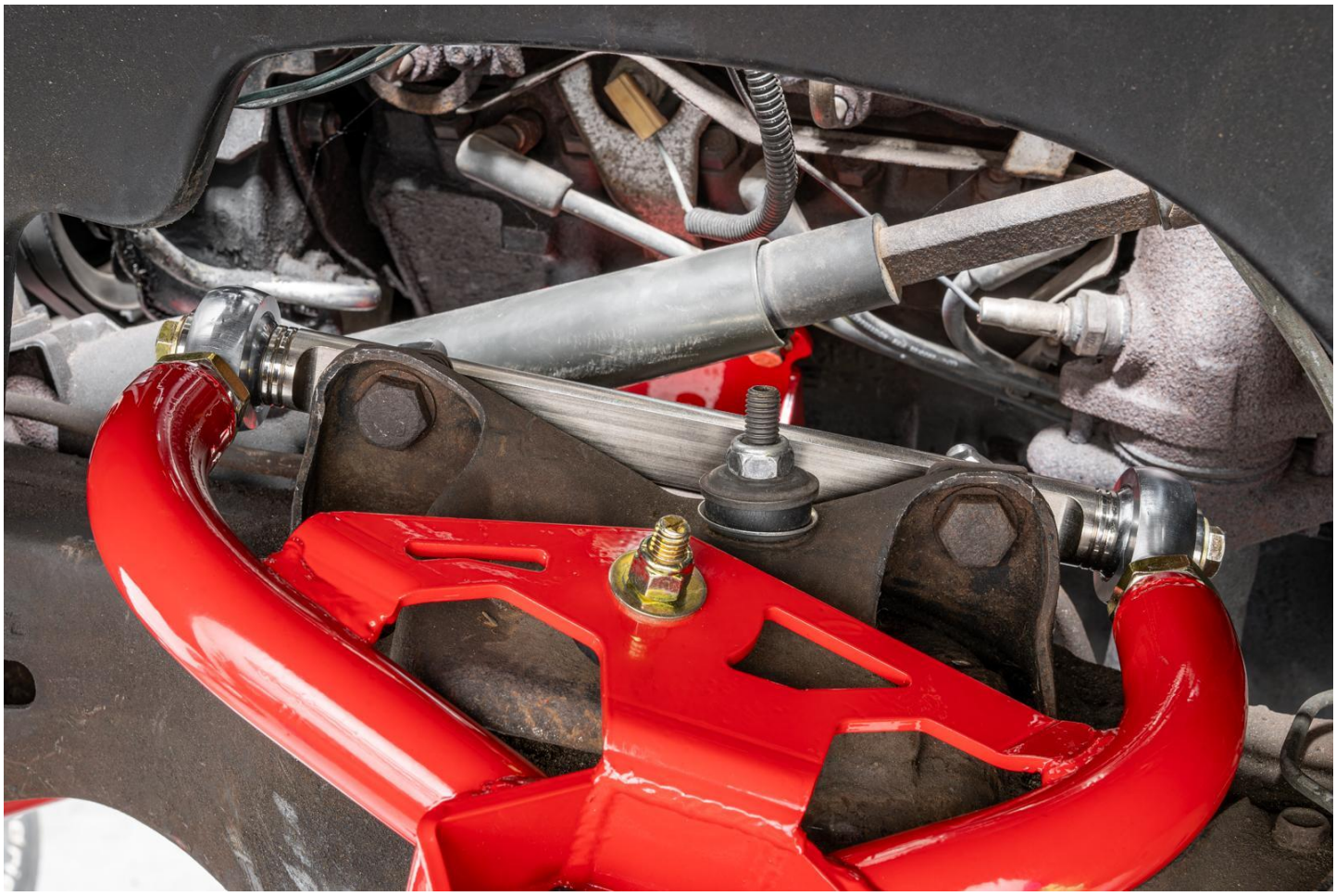
9. Remove factory bump stop and replace with provided bump stop. Using extensions and a 9/16”, torque the bump stop nut to **15 ft lbs** or snug.

10. Repeat steps 2-10 for the other side.

11. Insert 2-3 pumps of grease into each ball joint.

Please note: the socket head cap screws in the end of the cross shaft have been torqued by BMR during assembly.

AAK464 A Arm Kit Installation Instructions



AAK464 A Arm Kit Installation Instructions

LOWER A ARM INSTALLATION:

1. Beginning with one side of the vehicle, turn the wheels to allow access to the caliper mounting bolts.

2. Remove the two caliper bolts and slide the caliper off of the rotor. Leaving the brake line connected, tie the caliper up out of the way using a bungee cord or zip tie.

3. Remove the cotter pin from the outer tie rod end where it attaches to the spindle. Loosen the castle nut and remove it. Using a brass hammer, hit the spindle around the tie rod mounting hole until the tie rod breaks loose. Lower the tie rod out of the way.

4. Loosen the upper mounting nut on the shock and remove the bushing and washer. Loosen the two lower shock mounting bolts then remove the shock through the bottom of the A-arm.

5. Locate the outer sway bar end link where it attaches to the A-arm. Remove the end link mounting bolts from the A-arm.

   NOTE: *An inside spring compressor is the recommended tool for removing coil springs. Disregard steps 7-8 if you are using a spring compressor*.

6. Remove the cotter pin from the lower ball joint. Loosen the castle nut but DO NOT remove it. Using a brass hammer, hit the spindle around the ball joint mounting hole until the ball joint pops loose. A pickle fork may also be used for loosening the ball joint.

7. Position a floor jack under the A-arm and lift the arm until there is no spring tension on the ball joint. Remove the ball joint.

8. Carefully lower the A-arm as far as it will go. Using a pry-bar, carefully pop the spring out of the spring pocket and set it aside.

9. Loosen and remove both A-arm mounting bolts and remove the lower A-arm.

10. Use a wire brush to clean the bushing mounting surfaces on the frame. If the surface is heavily pitted or has a buildup of rust scale, sand the area thoroughly to provide a smooth surface for the new A-arm bushings to ride on.

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11. Identify the proper side BMR A-arm replacement by comparing the sway bar and bump-stop locations to the OE A-arm. Apply the supplied grease to the outer mating surfaces of the A-arm bushings. Mount the A-arms to the frame but do not tighten.

12. Disregard this step if you are using a spring compressor. Swing the A-arm up and position the hydraulic jack underneath the A-arm. Lift the spring up and position it onto the upper spring pocket in the frame, allowing the bottom of the spring to rest on the A-arm pocket.

    NOTE: *It may be necessary to lift the A-arm in order to get the spring pocket at the correct angle for the spring to pop into place*. With the spring in position, the end of the spring should butt up against the stop in the spring cup of the A-arm.

13. Once the spring is seated properly in the cup, carefully lift the A-arm until the ball joint seats into the spindle. Install the castle nut and Tighten. Insert the new cotter pin.

14. Re-install the caliper.

15. Repeat steps 2-16 for the other side.

16. To re-connect the sway bar, it is necessary to have the suspension loaded. The simplest way to do this is to drive the vehicle up onto ramps. Install the wheels and tires.

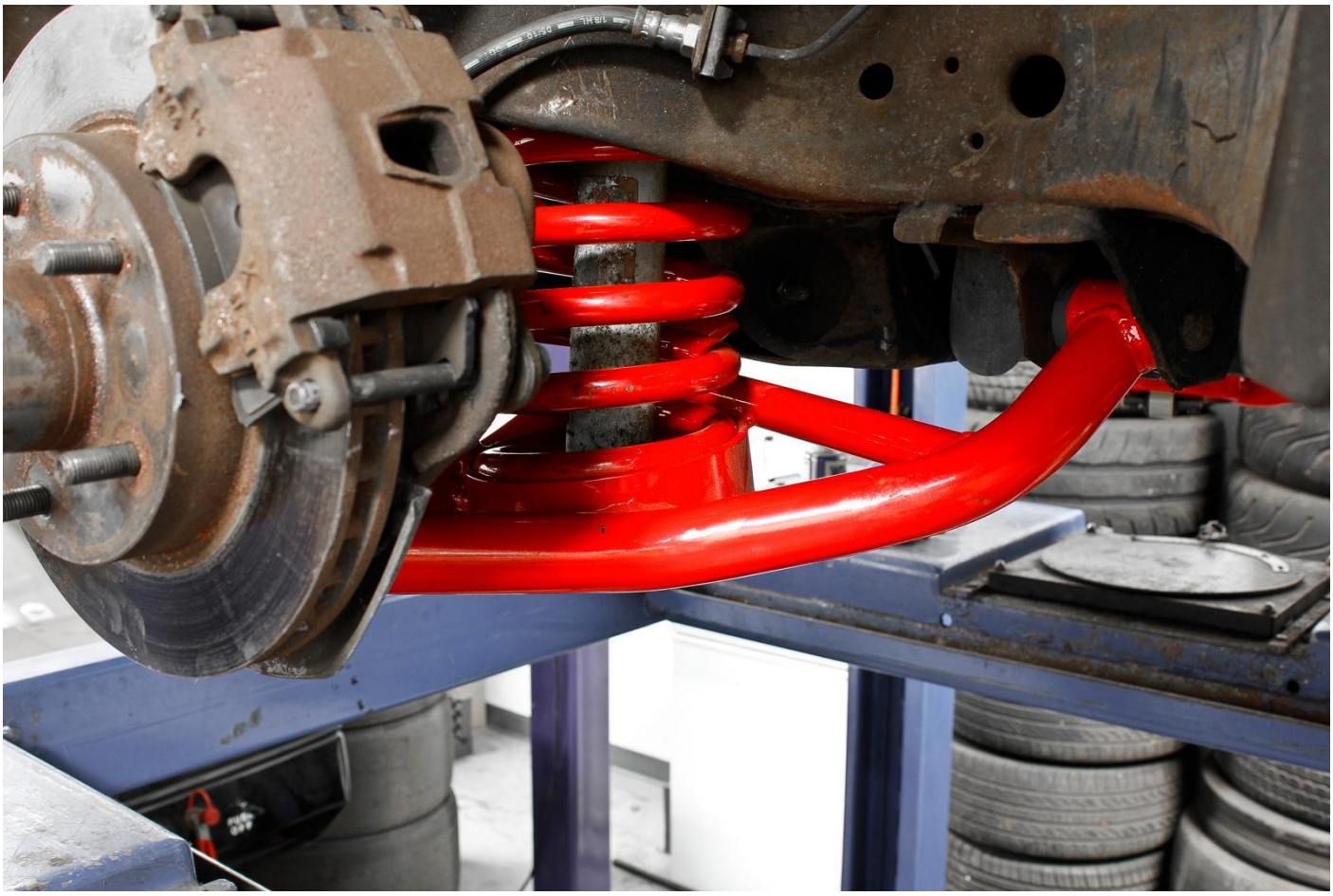
17. Drive the vehicle onto ramps then re-install the sway bar end links.

18. While the suspension is loaded, tighten the lower control arm bushings. NOTE: the vehicle's weight should be on the suspension before tightening the control arm bolts. Failure to do so can result in improper bushing preload causing irregular ride height and accelerated bushing wear.

19. Insert 5-6 pumps of grease into the lower ball joint. Insert 3-4 pumps of grease into each control arm bushing.

20. Lower vehicle.

AAK464 A Arm Kit Installation Instructions



BMR A-arms have improved geometry built into the A-arms. Your BMR A-arms have an additional 2 degrees of positive caster built into the arm which will affect your alignment. It is necessary to have the vehicle re-aligned after this installation. BMR recommends the following alignment specifications:

RECOMMENDED ALIGNMENT SPECS

Camber	Caster	Toe
Daily driver street – .3-.5 degrees negative	Max positive caster to achieve desired camber settings	1/16” Toe-in
Performance street - .5-.8 degrees negative	Max positive caster to achieve desired camber settings	1/16” Toe-in