

## BMR F-BODY A-ARM INSTALLATION

Part #'s AA001, AA002, AA004

## **Tools Required:**

Wrenches and sockets – 12mm, 13mm, 15mm, 18mm, 21mm Hydraulic jack and stands Grease gun Needle nose pliers

- 1. Raise vehicle and support with stands. Remove both front wheels/tires.
- 2. Using a 12mm socket, remove the two caliper retaining bolts and slide the caliper out of the way. There is no need to remove the brake line from the caliper.
- 3. Unplug the ABS sensor from the back of the hub. Remove the plastic wire retaining clips from the lower A-arm and move the ABS wire out of the way.
- 4. Using a 13mm wrench and a 15mm socket, remove both bolts/nuts on the lower shock mount.
- 5. Using needle nose pliers, remove the cotter pins from both the upper and lower ball joints. Remove the upper ball joint nut using a 15mm wrench. Using a pickle fork, knock the upper ball joint loose.
- 6. Loosen the lower ball joint nut using a 18mm wrench and knock the ball joint loose. Move the spindle/rotor assembly out of the way. If you want to completely remove the spindle, loosen the tie rod nut using a 18mm wrench and knock the tie rod loose.
- 7. Locate the shock mounting bolts in the engine bay. The rear two are bolts while the front two are studs. Remove the front two nuts using a 15mm wrench and the rear bolts using a 13mm wrench. Pull the upper A-arm and the shock/spring assembly out of the wheel well.
- 8. Using a 15mm and a 18mm wrench, loosen the bolts that hold the upper A-arm into the factory-mounting bracket. Remove the factory A-arm.
- 9. Install the new upper ball joints supplied with the A-arms. If using BMR adjustable upper A-arms, it is possible to correct caster problems by threading the rod-ends in or out depending on your needs. If camber correction is required, it is recommended to perform this installation on an alignment rack and adjust as necessary. If additional camber correction is not needed, adjust the rod ends to the OE length and tighten the jam-nuts.
- 10. One the ball joints have been installed, grease the polyurethane bushings and then bolt the BMR A-arm into the bracket using the existing mounting hardware. When installing the A-arms, the curved section of the A-arm goes towards the front of the car with the ball joint mounting plate at an upward angle.
- 11. If you are only changing the upper A-arms, repeat steps 1-9 for the other side and then reinstall components. To replace the lower A-arms, proceed to step 12.
- 12. Locate the lower A-arm mounting bolts. The location of these bolts in the K-member dictates the alignment settings. Mark the position of the bolts and then loosen them using a 21mm wrench. Remove the A-arm.
- 13. The BMR lower A-arms utilize an adjustable spherical bearing (rod end) on the rear mount. While holding the BMR A-arm over the factory A-arm, turn the spherical bearing to adjust it to the approximate length of the factory A-arm bushing. Ensure that it is horizontal in relation to the A-arm and tighten the jam-nut. *NOTE: Failure to position the spherical bearing horizontally can result in breakage due to limited articulation and binding*.
- 14. Position the rod-end spacers into the rod-end and grease the A-arm bushings. *Note: When using a BMR K-member, it may also be necessary to use washers in conjunction with the rear spacers in order to shim excessive clearance in the mount.*
- 15. Set the A-arm position to your previous marks and tighten the bolts. Lift the A-arm up and down to ensure that it has full range of motion without any binding. Make sure that the rear rod-end is horizontal in the mount.
- 16. Re-install the upper A-arm and shock/spring assembly into the upper shock tower.
- 17. Using the supplied 3/8" bolts, nuts, and washers, bolt the lower shock mounts to the lower A-arm.
- 18. Reinstall the spindle/rotor assembly and install new cotter pins. NOTE: Some aftermarket brake kits may interfere with the ball joint cup of the A-arm. In this instance it is necessary to clearance the ball joint cup in the appropriate area.
- 19. Reinstall the caliper.
- 20. Plug the ABS sensor in and route the ABS wire along the back tube of the A-arm. Zip tie the wire to the A-arm.
- 21. Check to make sure all bolts are tight and reinstall wheels/tires.

In some racing applications using adjustable coil-over type struts it may be necessary to add additional ride height to the vehicle. BMR manufactures aluminum strut spacers in ½" increments to lift the vehicle up to 1", if necessary. These can be ordered direct under part # **SA002**.



Part #'s AA001, AA002, AA004

## NUMBERS CORRESPOND TO STEPS ON THE INSTRUCTION SHEET.





**NOTE**: A rotary file was used to elongate the holes in the lower mount of the strut to properly align with the lower a-arm. This applies to stock lower arms as well. This is common if equipping with **Strange Engineering** coil overs.

## WWW.BMRFABRICATION.COM