



BMR MANUAL RACK CONVERSION KIT
PART# RK001

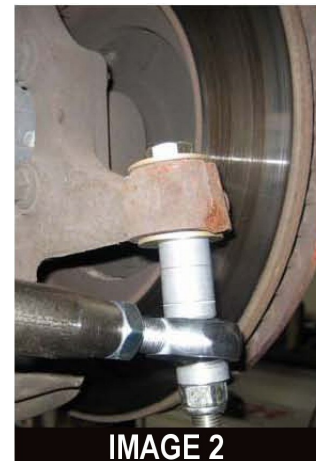
Before proceeding it should be noted that this kit is designed to be used only with BMR tubular K-members.

Installation Procedure:

1. With the BMR tubular K-member installed, loosely bolt the rack and pinion into place using the supplied bolts and billet BMR rack adapter. Make sure you can remove the driver's side bolt from the K-member as this will aid in the installation of the steering shaft later. (See main image below for proper rack adapter mounting)
2. Verify that the new manual rack is centered by using the following procedure: turn the input shaft all the way in one direction then measure the distance from the end of the tie rod end to the rack mounting flange as shown in **IMAGE 1**. Now turn the shaft all the way in the opposite direction and record this measurement as well. Subtract the smaller number from the larger and this will be your centering measurement.



3. Using an 11mm wrench, remove the bolt on the upper portion of the steering shaft where it attaches to the column. Slide the steering shaft off the column. *NOTE: Keep the bolt removed from the factory u-joint.*
4. Take the pre assembled u-joint/shaft assembly that came with your RK001 and slide the end with the hole inside the steering column. Use the supplied 10mm nut along with the factory bolt and tighten them down.
5. Now take the other end of the shaft with the female splined u-joint and slide that over the male shaft on the rack. *NOTE: This is where removing the drivers' side rack bolt will allow the rack to swing out, making it easier to slide the u-joint on.*
6. Slide the rack back into place and tighten the set screw and jam nut. Also tighten the 4 remaining rack bolts (2 on the K-member and 2 on the billet mount)
7. It is now necessary to modify the vehicles spindles in preparation for installing the outer tie rods. Using a 1/2" drill bit, drill out the tie rod mounting holes on the spindles.
8. Locate the outer tie rod assemblies and thread them onto the outer portions of the rack and pinion approximately 2 inches per side.





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9. For the next step, the vehicle needs to be resting on the suspension in order to get the wheels adjusted square and set the toe. Insert the bolts from the rod ends into the spindle, attaching both spindles to the rack and pinion.

The spacers and washers should be assembled with a washer on each side of the spindle and a beveled spacer on each side of the rod end. (See the image to the right). Tighten both bol

10. Turn both adjusters until the wheels are square. This can be accomplished by turning the adjusters left or right to shorten or extend the length of the tie rod end. The toe can be crudely measured by using a tape measure to find the distance between the rear of the front tires and the front of the front tires. The measurement should be as close to equal as possible.

11. At this point the vehicle should be taken to an alignment shop. Once the toe is properly set, an experienced alignment technician can fine tune bump-steer by adding or removing spacers at the outer tie rod bolt. *NOTE: Various length spacers are provided for varying ride heights. It may not be necessary to use all of the spacers in every application.*

