



LS1 TUBULAR K-MEMBER INSTALLATION

PART # KM003, KM003-1

Required Tools:

- Jack and jack stands or service lift
- Wrenches - 8mm, 10mm, 11mm, 13mm, 15mm, 18mm
- Sockets - 10mm, 13mm, 18mm, 21mm
- Various ratchet extensions and universal joints
- Pry bar
- Brass hammer or pickle fork

Installation Procedure:

1. Using an 8mm wrench, remove the positive cable on the battery.
2. Using a 15mm wrench, loosen the serpentine belt tensioner and remove the belt from the alternator.
3. Lift car so that factory k-member is at least 18" from ground. Support car with jack stands under frame rails.
4. Remove front wheels/tires.
5. Using a 13mm socket and wrench, remove the front sway bar.
6. Using an 18mm wrench, remove both power steering lines and cap hoses to prevent fluid loss.
7. Using a 13mm and a 15mm socket, remove all 3 bolts holding the alternator in place, unplug wiring harness, and remove the alternator. This is necessary in order to access the factory motor mount bolt.
8. Support the motor with a jack and a block of wood under the oil pan.
9. Using an 18mm socket and wrench, remove the drivers' side motor mount bolt.
10. Using a 13mm socket, remove the two bolts holding the starter in place. Starter may be removed completely or it may hang, suspended by the battery cable.
11. Using a 13mm socket, remove all 4 bolts holding the passenger side motor mount to the motor. This will require a combination of extensions and flexible u-joints in order to access all of the bolts.
12. Remove the cotter pins from both outer tie rod ends. Using an 18mm wrench, loosen both castle nuts until the nut is flush with the top of the stud. Using a brass hammer, tap the castle nut until the tie rod breaks loose from the spindle (see image below). This may also be accomplished by using a pickle fork, if available.
13. Using a 15mm wrench and 18mm socket, loosen both rack and pinion mounting bolts. It is not possible to remove the drivers side bolt until the k-member is lowered.
14. Using an 11mm wrench, remove the steering shaft bolt located directly above the rack and pinion.
15. Using a 10mm socket, remove all 4 brake line retaining tab bolts that attach to the side of the k-member.
16. Using a 21mm socket and wrench, remove both lower A-arm mounting bolts for both the drivers and passengers' side.
17. Using an 18mm socket, remove all six k-member mounting bolts.
18. Lower k-member enough to remove the drivers' side rack and pinion bolt. Remove rack and pinion assembly.
19. At this point it may be necessary to utilize a second person. While holding the A-arm assemblies out of the way, lower the k-member out of the car. Take care not to damage any of the brake lines or starter wiring harness when removing the k-member. It is not necessary to remove the brake lines when performing this install.
20. Remove the passenger side motor mount from the stock k-member and install on motor.
21. Lift BMR k-member up into car. This will require aligning multiple points at the same time so again, additional help will be required. It may be necessary to use a pry-bar in order to align all of the mounting points and position the k-member into place. Install and tighten all 6 mounting bolts.



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22. Reinstall alternator. Reinstall serpentine belt.
23. If retaining the OE power rack and pinion, mount the rack to the K-member. Tighten both bolts to 80 ft/lbs. If installing a BMR manual rack conversion kit, refer to those instructions and skip step 24, 26, and 28 below.
24. Attach steering shaft to rack and pinion and tighten bolt. There is an additional 11mm bolt at the top of the steering shaft that may also be loosened to allow steering shaft length adjustment, if necessary.
25. Install both motor mount bolts from the rear (from the factory they are installed from the front) and tighten. This may require using a jack or pry-bar to lift/lower the motor in order to insert the motor mount bolts.
26. Reconnect both power steering lines and tighten.
27. Insert all 4 A-arm mounting bolts. If vehicle must be driven to an alignment shop, roughly center all mounting points in the adjustment slots and tighten all 4 bolts. If vehicle is at an alignment shop, leave loose until installation is complete.
28. Insert tie rods into spindles and tighten both castle nuts. Insert new cotter pins.
29. Reinstall starter.
30. Slightly bend the factory brake lines to conform to the new k-member and zip-tie into place. Brake lines should look similar to figure 2 when finished.
31. Bend the ends of the brake lines in such a way that the mounting brackets line up with the brake line mounting tabs on the k-member. You may also have to cut the brackets and re-bend them in order to fit properly. Insert bolts and tighten. Once connected, brake lines should look similar to figure 3 below.
32. Reinstall sway bar.
33. Lower vehicle and reconnect battery.
34. Take to an alignment shop and align the front suspension.



NOTE: For manual rack versions of this K-member, just disregard the OE rack re-installation steps and refer to the installation instructions from the appropriate rack conversion kit.

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This product is an aftermarket accessory and not designed by the vehicles manufacturer for use on this vehicle. As such, buyer assumes all risk of any damage caused to the vehicle/person during installation/use of this product.