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21730 Hanover Ave. Lakeville, MN 55044 www.QA1.net

ASSEMBLY INSTRUCTIONS **MUSTANG K-MEMBER**

THIS PRODUCT IS DESIGNED FOR **COMPETITION PURPOSES ONLY** *SEE WARRANTY & DISCLAIMER ON LAST PAGE*

READ INSTRUCTIONS COMPLETELY BEFORE STARTING THIS PROJECT

Tool requirements may vary according to the year Mustang you own.

- Engine hoist or pull chain
- Floor jack • Jack stands
- Metric Sockets
 - 13/16 and 15/16 sockets and boxed end wrenches
- Bench grinder or other grinding tool
- Spring compressor (optional) Air tools are helpful

REMOVAL:

Caution! Installing this product requires disassembly of some components of the steering system. If you are not confident you can complete the job safely, have the work performed by a certified technician who is familiar with the front suspension of a Mustang. Failure to install this part properly may lead to serious injury or death.

Before starting the installation of your QA1 k-member, read the instructions carefully and thoroughly. A good chassis manual, available at your local parts store, may also aid in your installation. Check to make sure you have all of the parts and hand tools needed to complete the installation.

 Raise the front of the car and place it on jackstands. Consult your owner's manual for proper jacking points. Jack the vehicle up so that the vehicle sets securely on the stand. SEE YOUR CAR'S OWNER'S MANUAL FOR PROPER JACKING LOCATIONS AND SUSPENSION DISASSEMBLY. DEATH OR SERIOUS INJURY CAN RESULT IF INSTRUCTIONS ARE NOT CORRECTLY FOLLOWED.

- Start your QA1 Mustang K-member installation by inspecting your chassis components. Look for worn out bushings, ball joints, etc. If anything looks suspicious, now is the time to replace it.
- Jack the car up so the jack stands can be placed under the frame. Let the jack down so that the frame sits securely on the stands.
- Remove the wheels and then unbolt the brake calipers. Tie them up out of your way.
- Remove the sway bar end link bolts and bushings.
- Use the jack to support one of the A-arm assemblies. Jack the A-arm up just enough to take the load off of the strut and the spindle. Loosen and remove one of the two bolts that retain the strut to the spindle. Slowly, CAREFULLY, let the A-arm assembly down until the spring is free and can be removed.
- Repeat the procedure for the other side.
- Mark the steering linkage to help aid in realigning the components on reassembly. Disconnect the steering joint.
- Support the engine with an engine hoist
- Remove and retain the motor mount bolts from the stock K-member.
- Supporting the stock K-member with the floor jack (during removal process you will need a couple of helpers, one on each side of the K-member and one operating the floor jack), remove and retain the four (4) 15mm bolts in the rear of the K-member.
- Remove and retain the four (4) 18mm bolts in the front upper spring perches.
- Carefully lower the K-member and roll it out, on the floor jack, from under the car.
- Securely support the stock K-member and unbolt the rack. Do not remove at this time.
- Remove the four bolts that connect the A-arms to the K-member.
- Slide the rack and A-arms off of the factory K-member as an assembly.
- If you are using the stock A-arms, grind the leading edge of the lower A-arms pick up points. This allows clearance so that the A-arm will not interfere with your QA1 K-member under full suspension compression and extension. Be sure to take all of the safety precautions when grinding the A-arms. (If you are using an aftermarket A-arm kit, refer to the instructions supplied with that kit.)
 1979-1985 Mustangs should use aftermarket or '86 and later stock A-arms.

NOTE:

In some applications, the drivers side motor mount may have to be clearanced a small amount to allow the rack (manual or power) to fit properly. In some instances a manual rack from the '82-87 Mustang will be required to complete the installation. These replacement racks, available through NAPA, MOOG, TRW and others, may also need minor clearancing at the pinion support. We recommend the use of the Flaming River manual rack kit # FR1890. For '94-95 Part #FR1892.

Replacement rack bushings can be purchased at a local parts store. MOOG part number K-8422 or can be crossed over to equivalent from other companies.

INSTALLATION:

- Grease the rack mounting shafts with white lithium grease and slide the rack and A-arms onto your new QA1 K-member. (Some later racks come with serrated bushings that are not compatible with the QA1 K-member. These will need to be replaced with the MOOG K-8422 bushings, as noted earlier.)
- Install the A-arms and rack. To install the A-arms, the head of the rear most A-arm bolts will have to be flat sided on one side only. Take off only the amount needed to make the bolt fit. This will allow the bolt to slide in from the backside and also lock itself into place. When mounting the rack to the QA1 K-member use LOCTITE® on the two (2) ½" x 20 x 1" bolts. Install with the two (2) ½" flat washers.
- To start the installation back into the car make sure that all of the clip nuts are clean and in place.
- Test fit the spring mounting pads for the proper side. They will only fit on one side or the other; they are not interchangeable from on side to the other. They will, however, go in two different directions on their proper side. Make sure that the spring cups are pointed outward toward the tires and not inward toward the motor.
- Slide the K-member back under the car. Make sure you have some extra helpers around to stabilize the assembly as you jack it back up into the car.
- Install the four (4) rear K-member bolts. Do not tighten completely at this time.
- Install the four (4) upper spring perch bolts. Do not tighten completely at this time.
- Torque all eight bolts (4 upper spring perch bolts and 4 rear chassis bolts) to the factory specifications.
- Lower the engine hoist to realign the motor mounts and install the motor mount bolts. Torque to the factory specifications.
- Make sure the steering linkage is realigned and assemble the steering joint. In some cases the steering shaft section located at the firewall will have to be moved forward (pulled out) to mate up with the steering joint.
- Place the floor jack under one of the A-arms. Align the spring into its factory location, making sure that it is set in the original recesses. Jack the A-arm up until you can re-assemble the strut to the spindle (a professional style spring compressor will make this assembly easier). Replace the two (2) lower strut bolts and torque to the factory specifications.
- Repeat for the other side.
- Re-install the brake calipers.
- Re-install the wheels
- Now that your installation is complete, your first stop must be to a front-end alignment shop for alignment of your vehicle.

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QA1 Precision Products, Inc. RGA #_____ 21730 Hanover Avenue Lakeville, MN 55044

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