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# 1979-2004 Fox Body Tubular K-Member Instructions

It is always a good idea to read through the installation instructions completely before attempting this installation. This way you know what to expect. GMS pioneered the first production style tubular Mustang K-Member in 1993. Over the years we have made several improvements culminating with the Hercules Series Mustang Front Suspension System.

## **Special Note:**

This K-Member is designed to work with tubular Front Control Arms and Front Coil Over Conversion kits, also offered by Granatelli Motor Sports. It is highly recommended you also use adjustable bump steer tie-rod ends and Caster/Camber plates. You will also need to (re)use your OEM steering rack bushings. The rack bushing must be a 2 piece design.

#### Upgrade Available:

We recommend using poly urethane rack bushing sets, available in standard and offset. Part number 410104G for the offset bushings, and 410103G for the standard bushings.

#### Unique features and benefits:

Increased Header Clearance Over Stock Ultra Durable Design Insures Chassis Rigidity Increase Caster Approximately 2 Degrees for Better Handling and High Speed Control

#### **Tools Required:**

Metric & American Selection of Sockets and Wrenches Torque Wrench Floor Jack or Hoist Cherry Picker (Engine Hoist) Jack Stands

#### **Removing Your Stock K-Member:**

- 1. Disconnect the Ground wire from the Battery
- 2. Always use jack stands to support the chassis.
- 3. Remove the wheels.
- 4. Remove tie rods ends from spindles
- 5. Unbolt front calipers and hang out of the way in the wheel well. No need to disconnect brake lines.
- 6. Remove rotors.
- 6. Unbolt front sway bar end links.
- 7. Loosen front control arm bolts (both sides). Don't remove yet!

#### Note: A coil spring compressor should be used at this point.

8. Support the ball joint end of the arm with a jack, unbolt ball joint from spindle ad lower jack very slowly. Remove stock springs.

- 9. Remove control arms bolts and remove control arms.
- 10. Remove spindles.
- 11. Remove the 2 bolts that hold the steering rack to the factory K-Member and pull the rack as far forward and down as possible to get it out of the way. Note: There is no need to disconnect the lines going to the rack unless you are planning to go to a new unit and manual rack.
- 12. Remove the retaining nuts that capture the motor mounts to the K-Member.
- 13. The engine needs to be supported from the top so that you can drop the K-member from the bottom but not the engine.
- 14. The engine needs to be lifted just enough so the motor mount studs clear the K-Member on both sides
- 15. Remove K-Member by loosening the four main bolts that mount into the frame and the four bolts at the rear.
- 16. The K-Member should now be able to drop down. Pay special attention not to catch any wires that may be in the way.

#### **Reinstalling New GMS K-Member:**

- 1. Using the eight factory bolts just removed from the factory K-Member, reinstall the new GMS K-Member. At this point, do not tighten all the bolts. It may be necessary to loosen the bolts that fasten the motor mounts to the block. This allows you to wiggle the mounts as the K-Member is put back into place.
- 2. Once the motor mounts are in place and the eight bolts are hand tight you want to make sure the Kmember is as square as possible to the frame.
- 3. Once you have the K-member as square as possible, tighten all eight bolts holding the K-Member to the car and the engine mounts.

## **Reinstall Tubular Arms:**

1. Grease control arm bushings first, and install them into arms. Grease inner sleeves and install them into bushings.

#### Note: Short sleeve goes in front bushing of each arm.

- 2. Grease contact surface of K-member at contact points of control arms.
- 3. Now install arms in K-member, reuse stock bolts and torque to factory specs. Bolt spindle to arm and torque to spec.
- 4. Bolt brake caliper and wheels on, torque to spec.

## **Reinstall Steering Rack:**

- Install the Stock rack bushings (DO NOT reuse the factory steel inserts) on the rack; place the assembly on the newly installed K-Member insuring proper engagement of the steering shaft. Note: the steering shaft can only go on 1 way – THE RIGHT WAY! Do not force this step. Make sure you have proper alignment and full engagement. (You **MUST** use OEM Ford style **two piece** rack bushings, 1 piece bushings will not fit)
- 2. Using the (2) supplied ½-20x1.50" Rack bolts and washers; screw them in by hand in from the front towards the engine. Confirm the boots on the steering shaft are not interfering with anything and then torque rack bolts down to 50 ft/lbs.
- 3. Confirm you have installed the steering shaft bolt and torque to factory specs
- 4. If you have replaced your tie rod ends or are using an aftermarket bump steer kit, install your tie rod end or bump steer now and torque to factory specs.
- 5. Alignment should be checked for your specific needs.

# LIMITED WARRANTY & LIABILITY AGREEMENT

Granatelli Motor Sports warrants that all products it manufacturers shall be free from defects in materials and/or workmanship for ninety days from the date of purchase (except in-tank and in-line fuel pumps purchased at dealer or wd prices as these items have no warranty. The following requirements and exclusions apply: (1) You must be the original purchaser and must complete the warranty registration form (located at www.GranatelliMotorSports.com/warranty.asp) and return the defective product within 10 days of your original purchase. Failure to do so voids all warranty, either express or implied set forth herein. (2) You must reside in the United States or Canada and use the product as described in the warranty registration. (3) The product must not have been altered, disassembled, modified, or converted for any other use than intended by Granatelli Motor Sports. (4) The product, or any part thereof, is not used in accordance with the operating parameters specified by Granatelli Motor Sports (5) The product or any part thereof is damaged or rendered unserviceable due to negligence, vandalism, theft, fire, debris, flood, Act of God, or other peril, malfunction of equipment, or by any cause within the Customer's control. (6) The serial number (if applicable) must not have been altered or removed. The extent of Granatelli Motor Sports' liability under this warranty shall be limited to the prompt correction or replacement, at Granatelli Motor Sports' option and at no cost to the customer other than return shipment, of any defective part of the product determined to be necessary by Granatelli Motor Sports. This only applies if written notice of the claimed defect was received by Granatelli Motor Sports prior to expiration of the warranty period. All warranties of merchantability and fitness for a particular purpose are expressly excluded. The duration of any and all implied warranties is limited to the duration of this express warranty. All incidental and consequential damages including but not limited to loss profits even if it has been advised of the possibility of such damages are hereby excluded. Regardless of the form of the claim. Granatelli Motor Sports liability for any damages to the customer for such product is limited to the guidelines herein. This stated, expressed warranty is in lieu of all liabilities or obligations of Granatelli Motor Sports for damages arising out of or in connection with delivery, use or performance of the product. This warranty cannot be amended or changed by any Granatelli Motor Sports representative, employee, or agent and any promises inconsistent with this warranty are void and unenforceable against Granatelli Motor Sports. Some states do not allow limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights that vary from state to state. Your sole remedy for the above warranties is the repair or replacement of the defective product only, at Granatelli Motor Sports' sole discretion.

#### **RETURN POLICY:**

NOTE: No returns accepted without pre-approved RGA (return goods authorization) number clearly marked on the outside of the box. No returns accepted on special orders or after 90 days from date of original shipment. All returns are subject to a 25% restocking fee. Before you return this product, contact our service department M-F 8AM-5PM (PST) at 805-486-6644, Ext. 23 or techsupport@GranatelliMotorSports.com for an RGA number. Returns made without prior authorization will be refused. All returns must be made within 30 days from date of original shipment, safety packaged in original packaging (if available as in-transit damage is not covered by our limited warranty), have the RGA number clearly marked on the top and two sides of the box and be insured for full replacement value. We recommend using UPS or Fed Ex for shipping. All returns are subject to a restocking fee up to 25%. The balance will be returned in the form of a check or may be applied as credit towards another purchase. Special orders and electrical components are not eligible for returns. For warranty registration, go to: www.GranatelliMotorSports.com/warranty.asp.

#### PERFORMANCE CONSUMER'S BILL OF RIGHTS:

Legally, a vehicle manufacturer cannot void the warranty on a vehicle due to an aftermarket part unless they can prove that the aftermarket part caused or contributed to the failure in the vehicle (per the Magnuson Moss Warranty Act, www.GranatelliMotorSports.com/magnusonmoss.htm (15 U.S.C. 2302(C)). For best results, consider working with performance-oriented dealerships with a proven history of working with customers. If your vehicle manufacturer fails to honor emission/warranty claims, contact EPA at (202) 260-2080 or www.epa.gov. If federal warranty protection is denied, contact the FTC at (202) 326-3128 or www.ftc.gov. For additional information, check out the following links: Consumers Bill of Rights - http://www.enjoythedrive.com/content/?id=8123 What You Can Do If Your Warranty Is Denied - http://www.enjoythedrive.com/content/?ID=8124 Federal Warranty Laws - http://www.enjoythedrive.com/content/?id=8128

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