

# INSTALLATION INSTRUCTIONS

# P/N: C2020

## MUSTANG ANTI-ROLL BAR KIT

This kit is designed for use in all 1979-93 Ford Mustangs to control side-to-side body roll during hard launching. It mounts between the frame rails of the chassis above the rear axle housing with links that attach to the housing. It is adjustable for preload enabling you to tune for changing track conditions.

## PARTS LIST

- 2) Billet Arms
- 1) Side Mount, LH
- 4) Mount Tabs
- 2) 1/2" RH Rod Ends
- 2) Grease Fittings
- 4) 1/2"-20 x 2" Bolts
- 4) 1/2"-20 Locknuts
- 2) 1/2"-20 LH Jam Nuts

- 2) Adjuster Links
  - 1) Side Mount, RH
  - 2) 1/2" LH Rod Ends
  - 2) Nyliner Inserts
  - 2) 3/8"-16 x 2-1/2" Bolts
  - 2) 3/8"-16 Locknuts
  - 2) 1/2"-20 RH Jam Nuts
  - 4) Self Drilling Screws

Read these directions thoroughly before beginning installation. Four self-drilling screws have been provided in the kit to hold the anti-roll bar assembly in place prior to welding. WELDING OF THIS KIT IS MANDATORY! DO NOT USE THE SCREWS AS THE SOLE MEANS OF RETAINING THIS DEVICE.

### INSTALLATION

- 1. Pre-assemble the Antiroll Bar Kit as follows:
  - a. Thread the 1/2" spherical rod ends into the Adjuster Links using a jam nut on each end. Leave five threads showing above the jam nuts. Make sure both adjuster assemblies are of equal length.
  - b. Insert a Nyliner insert into the shouldered end of the side mounts. You may also install the grease fitting at this time into the hole provided in the mount.
  - c. Slip the two Billet Arms onto the tube
  - d. Slide the side mounts onto the torsion tube. The small tabs on the side mounts should face the front of the car. (see diagram)

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For Technical Assistance, call Competition Engineering's Tech Line at (203) 458-0542, 8:30am-5:00pm Eastern Time

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- Locate the torsion bar assembly under the car so that the side mounts sit flush against the inside of
  the frame rails with the small tabs on the mount resting against the rear seat bulkhead. At this point
  the bar should be located ahead of and above the rear axle housing with the billet arms pointing
  rearward.
- 2. Using the holes provided in the side mounts install the self-drilling screws with a hex driver drill so that it holds the assembly in position.
- 3. Install one end of the adjuster link assembly into the slotted end of the billet arm. Fasten the assembly in place using the 1/2"-20 hardware.
- 4. Bolt the Mount Tabs to the opposite end of the adjuster links. Make sure that the wings on the tabs face out from the rod end.
- 5. Position the billet arm assemblies against the shoulder of the side mounts so that they ride against the Nyliner insert.

NOTE: The billet arms may be relocated along the torsion tube to clear exhaust pipes if necessary. Make sure that the arms are an equal distance from the end mounts on both sides. Keep in mind, the closer the arms are to each other, the more you increase the spring rate of the assembly.

- 6. Level the Billet Arms so that they are 90 degrees from the adjuster links. Mark the torsion tube with a magic marker through the 3/8" holes in the arms. If the adjuster assemblies are too long and prevent the arm from being level, you may shorten them and re-tap the tube with a 1/2"-20 tap. We recommend cutting the right hand threaded side because right hand taps are more commonly found. Remove the torsion tube assembly from the vehicle for drilling.
- 7. Using a drill press and a 25/64" bit, clamp the tube in the drill press vise and drill through the centerline of the torsion tube. Make sure that the tube is square with the drill bit before drilling.
- 8. Deburr the drill holes in the tube and re-install it.
- 9. Secure the billet arm assemblies to the torsion tube using the supplied 3/8"-16 hardware.
- 10. Position the mounting tabs on the end of the adjuster link assemblies onto the axle housing. Make sure that the adjuster link tubes are 90 degrees from the billet arms. Tack weld the tabs in place at this time.
- 2. With all dimensions correct and everything level and square, weld the side mounts to the frame rails and rear seat bulkhead. Also weld the mounting tabs to the axle housing. Use one of the rod ends between the tabs to keep the correct spacing during welding. We highly recommend removing the axles and bearings before welding to prevent warpage and damage.
- 3. Re-install the adjuster links and tighten the bolts securely. Do not tighten the adjuster link jam nuts at this time.
- 4. Install the supplied grease fittings and lube the bushings with a quality chassis grease.

### **ADJUSTMENTS**

Begin your tuning by creating a baseline setting for the vehicle. Install the lower adjuster link bolts so that they slide through the welded tabs on the axle housing. Rotate the adjuster links to achieve this. Tighten up all hardware and make a pass down the track. Have someone watch or even better, video tape the car as it leaves the starting line. Use the following guidelines to correct torque steer or chassis twist:

- If the car pulls to the right, lengthen the passenger side adjuster link to add preload.
- If the car pulls to the left, lengthen the driver's side adjuster link. You can also shorten the passenger side link to achieve the same results.

