



## PolyBronze™ Control Arm Bearings - Installation Instructions

Part #2051500

Protected by US Patent 7,325,796

### Cars Applicable

'68 thru '89 911, 912, 930 and 914

### Parts List

Qty	Description
2	Front Bronze Bearing (red)
2	Rear Bronze Bearing (black)
4	Bearing Race

### Required But Not Included

2-part steel epoxy

### Introduction

PolyBronze control arm bearings replace the rubber bushings securing the control arms to their mounts.

These bearings provide improved road feel and handling. They do not compress under load and thereby maintain suspension alignment settings.

PolyBronze control arm bearings are provided with integrated grease fittings making periodic re-lubrication easy.

**Note** – PolyBronze control arm bearings should be lubricated at installation and 3,000 mile intervals for street use, competition cars should lubricate every 8 days of track use. Use quality moly-based grease.



## Step-by-Step Installation

### 1 – Removing the metal end mounts and rubber bushings from control arms

With control arms removed from car, secure control arm in a bench vise.

Heat metal mounts using a propane torch until a small amount of rubber smoke is visible. Use a large screwdriver as a lever arm to twist the metal mounts off the control arm. If they are very hard to twist apply a bit more heat.



### 2 – Cleaning up the ends of the control arms

Be sure to remove paint and any surface irregularities on the section that contacts the race.

The control arm end should be clean, grease free and smooth to the touch.

Use sandpaper and degreaser as needed to ensure good adhesion in step 3.



### 3 – Fitting bearing races onto control arms

To accommodate for manufacturing variation in control arm shaft, races are made slightly oversized. Races are glued to the control arm and the gap filled using a two-part steel epoxy such as JB Weld, not included.

Coat the inside of the race with a thin layer of JB weld. Similarly apply a thin coat to the entire mating surface of the control arm. Your goal is a smooth thin layer on both mating surfaces that will completely fill the space between the race and the control arm with no voids.

Press race on with a twisting motion until race butts against the control arm flange.

**VERY IMPORTANT** – Be sure to clean ALL adhesive off the race and flange. Even a tiny amount will interfere with the bearing fit.

Allow the JB Weld to cure.



#### 4 – Installing bearings into the control arm front mounts

Clean any dirt and grease out of the inside of the control arm mounts.

**VERY IMPORTANT** - Lubricate the polyurethane with a soap and water solution to ease installation.

Use a red bearing and being careful to avoid misalignment, press the bearing into the mount. The press fit should require about 50-100 lbs. **Tip** – get the bearing started, then squeeze it using a bench vise until the bearing flange is flush against the mount.

If the bearing is loose in the mount, the fit can be assisted using urethane adhesive caulk. Apply a layer between the red polyurethane surface and the control arm mount.

Align the front grease nipple such that it points down and to the side as shown.

**VERY IMPORTANT** - Do not point the nipple straight down, this would leave the nipple prone to damage.

Repeat for the other front mount.



#### 5 – Installing bearings into the control arm rear mounts

With the black bearings, repeat step 4 using the rear mounts except orient the grease nipple horizontally and facing the outside of the car.



#### 6 – Installing control arms into car

Lightly lubricate the PolyBronze bearing surfaces with high quality suspension-grade grease. It's easiest to fit both bearings to a control arm, then install into the car as a complete assembly.

The front mounts have elongated holes allowing fore/aft adjustment. Position those mounts to allow free rotation but without fore/aft slop.

Before installing torsion bars, tighten the control arm mount bolts and check for free movement. Minor resistance to rotation is normal. Excessive friction or binding indicates a bent chassis or front mounts that are too far rearward (too tight).

#### 7 – Lubricating PolyBronze control arm bearings

Un-weight the suspension before lubricating to aid grease distribution.

Using a grease gun loaded with high quality moly-based grease, inject enough grease into each nipple so that a bit squeezes out of both ends of each bearing.

