

## Sphericals™ Control Arm Bearing set - Installation Instructions Part #2051001

#### Cars applicable:

'68 – '89 911/912/930 and 914

#### Parts list:

Qty Description

- 2 Front Spherical Bearing Assembly
- 2 Rear Sphericial Bearing Assembly
- 4 Bearing Race

#### Required but not included:

2 part epoxy for metal applications

#### Tools required:

Propane torch 17mm and 19mm sockets or wrenches Large screwdiver

### Introduction -

Congratulations on your selection of Sphericals<sup>™</sup> control arm bearings. Sphericals replace the rubber bushings securing the control arms to their mounts and provide outstanding ride and performance.

Sphericals have a ball-shaped bearing surface allowing action on multiple axis, allowing self-alignment to happen dynamically, preventing binding and allowing the suspension to work and move freely. Sphericals accommodate chassis flex and misalignment by self-aligning ball action.

Spherical are completely maintenance free and have a self lubricating bearing surface. Do not apply lubrication to your Sphericals.





Step-by-Step Installation -

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 more heat.

2 –Clean up the ends of the control arms

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 - Fit bearing races onto control arms

To accommodate for manufacturing variation in control arm shaft, races are made slightly oversize. Races are bonded to the control arm and the gap filled using a two-part metal epoxy, not included.

Note the races ship inserted into the bearings. Push them out for the bonding step.

Coat the inside of the race with a thin layer of epoxy. Similarly apply a thin coat to the entire mating surface of the control arm. Your goal is smooth thin layer on both mating surfaces that will completely fill the space between race and 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 epoxy to cure.











4 - Install Bearing Assemblies to control arms

Slide the Front and Rear Bearing Assemblies onto their respective Bearing Races.

Note that the front mount is not symmetric and the logo must face away from the car chassis.

Do not use any lubrication. The bearings are permanently self lubricating and require no maintenance.



5 – Install control arms into car

Fit the control arms into the crossmember. Align the front mount with the logo away from the chassis.

Install and secure all hardware finger tight. Push the front mount rearwards to remove any fore/aft play in the mounts.

Ensure the front mount is perpendicular to the control arm shaft, thus centering the spherical bearing in its range of motion.

Torque bolts to factory specifications.

