

Ghibli Steering Joints

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The steering joints were not designed to last this long! Ghibli ball joints incorporate bronze bearings but the steering joints utilize less expensive plastic ones that disintegrate.

Add just a little looseness in each of the six joints and excessive steering box and slave box clearances and you have real sloppy steering.

Some, if not all, of your grease seal boots may be torn, allowing grit to scratch the plastic bearings and water to rust the chromed ball. Fortunately, grease seal boots are currently available. Unfortunately, the internal parts are not available.

Most of the cars do have rebuildable joints. They are rebuildable if the cap on the opposite side from the nut has a 17mm hex to remove it. A spring wire retainer prevents the cap from turning. It must be removed first.

See Table 21, Items 61-67 to view the parts. Item 63 is a molded plastic ring bearing against which the shaft end of the ball fits. It is intricately shaped and would be difficult to machine. This part exhibited no visual wear at any location on my car.

Item 65 is a molded plastic cup bearing that fits against the ball. It is pressed against the ball by a strong die spring. The stress of the spring pushing along the outer edge of the bearing and the counterforce of the ball (for twenty-some years) is too much for the bearing. Four of mine had turned into sludge mixed with the grease, one had a few small pieces remaining and one had broken into three parts that I was able to reconstruct and measure.

I investigated plastic materials from which bearings are made, such as Vespel, but finally decided to machine a set of cup bearings from oilite bronze. This required a custom made ball end mill as well as a specially shaped cutter.

The cap was filled with moly grease and the parts assembled. Reinstalled, they feel tight and will function well.

Chuck Sternburg and I believe that aluminum bearings will perform perfectly due to the light loads encountered, combined with the grease. He has my tooling and will machine bearings. Call him if you want a set.

