

Product Bulletin

TO: All Valued Beck/Arnley Customers
FROM: Product Management
DATE: September 10, 2010
SUBJECT: Wheel Bearing Key Points

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Wheel Bearing Key Points

Wheel bearing types: cartridge, ball, spherical, and tapered roller designs

Beck Arnley 051-2000, 051-3000, and 051-4000 Series

Ball Bearing

Due to their low torque, they are suitable for applications where high speed and low power loss is required. They are easy to mount and suitable for many different configurations. Designed for better service in harsh environments.

Spherical Roller Bearings

Resist seizure, maintain dimensional stability, can support high radial loads and moderate axial loads, and resist wear in spite of constant vibration, misalignment and shock loads.

Single Row Taper Roller Bearings

This is the most basic and most widely used type of tapered roller bearing. It consists of two main separable parts: the inner race assembly and the outer race. It is typically mounted in opposing pairs on a shaft. These bearings are capable of taking high radial loads and also axial loads in one direction. They are designed to manage both thrust and radial loads on rotating shafts.

Double Row Taper Roller Bearings

Double row taper roller bearings have tapered inner and outer ring raceways between which tapered rollers are arranged. The projection lines of all the tapered surfaces meet at a common point on the bearing axis. Their design makes taper roller bearings particularly suitable for the accommodation of combined (radial and axial) loads in both directions. Designed with double cup and two single cones with a spacer, seal, and are a preset assembly.

- All wheel bearings are designed with high quality steel and are furnished as a preset assembly. These bearings are created with hardened high quality inner raceways, outer raceways and rolling elements to give maximum quality and load resistance.
- Special coatings provide for additional corrosion resistance

- Sealing – multi-lip design provides protection against water and debris contamination while containing lubricant within the bearing
- OEM equivalent design – dimensionally and structurally – providing easy-on assembly and long life under vehicle loading.
- Grease – high performance lubricant equivalent to OEM specification for long life, corrosion prevention and material wear resistance.

Hub bearings – ball and tapered roller designs

Beck Arnley 051-6000 Series

Hub Bearing Assemblies

Hub unit bearings have to meet increasingly strict requirements that demand lighter weight, greater promotion of fuel efficiency, and enhanced module production systems. They hold bearing settings more consistently than traditional thread and nut designs. The resulting system stiffness reduces rotor runout and improves brake performance.

- Sealing – multi-lip design provides protection against water and debris contamination while containing lubricant within the bearing
- ABS sensor (if applicable) provides accurate signal for proper brake system function
- OEM equivalent design – dimensionally and structurally – providing bolt-on assembly and long life under vehicle loading.
- Induction hardened, bearing quality steel outer raceways – bearing quality steel outboard inner raceway – through hardened, bearing quality steel inboard inner raceway and rolling elements.
- Wheel bolts (where applicable) meet or exceed ASTM/SAE standards for tensile and yield strengths as well as push-out and torque-to-rotate.
- Grease – High performance lubricant equivalent to OEM specification for long life, corrosion prevention and material wear resistance.