71000 Series Axle
Over 100 Years of Bus and Coach Expertise
use a single reduction drive axle from the bus and coach component experts.

 Millions of people rely on public transportation every day. As ridership continues to grow, so do industry demands. Today’s alternative-fuel and low-floor bus designs have provided some valuable answers to functionality issues.

To complete the journey to total performance, ArvinMeritor has developed the 71000 Series Axle. With a 28,660 lb. gross axle weight rating (GAWR), the 71000 Series adopts the company’s proven design practice by featuring a one-piece cast iron housing for extra strength and durability, a more robust carrier and optional unitized bearing wheel ends for maximum uptime and minimum maintenance. The 71000 Series also utilizes Quiet Ride™ gearing that provides industry leading levels of noise quality and quietness.

When all is said and done, the 71000 Series Axle boasts a number of features that make the bus ride what it needs to be... a relaxing experience.
Leading the Way in the Bus and Coach Market

Since the first bus rolled off the assembly line and down the road, ArvinMeritor has been building quality drivetrain components. Through the years, our ever-growing knowledge and experience in this market has enabled us to take the lead as the industry standard in transit bus axles. We have established that success by creating consistently superior products time and again.

Built specifically for the high start-and-stop duty cycles of the transit bus industry, the 71000 Series Axle follows this tradition. Like all Meritor® bus and coach components, the 71000 Series adheres to a specific design protocol that is based on high quality and attention to detail. The finished product is one we’re confident to stand behind.

Following the Leader

From behind the wheel to the back of the bus, safety and comfort will always be top priorities. Maneuverability, durability and spacious passenger capacity are good starting points. What you may not realize is that achieving these goals inside the bus actually begins under the bus.

The 61000 Series Axle has long been the industry standard, filling this role with a safe, comfortable ride. To meet changing industry demands, ArvinMeritor created the 71000 Series single reduction drive axle as a direct replacement for the 61000 Series. Several new features were incorporated to improve efficiency and overall performance, bringing the bus ride experience to the next level.

Stronger Cast Housing

A one-piece ductile iron housing with integral suspension bracket pads and “bolt-on” torque rod brackets provide a stronger foundation for the 71000 Series axle, as well as a higher GAWR capacity of 28,660 lbs. (13MT). The cast housing is designed to accommodate all bus suspensions. As a result, the 71000 Series, with its specialized cast-in suspension pads, easily replaces the 61000 Series with a simple installation process.

Robust Carrier

With ongoing developments in CNG, Hybrid, Articulated and Bus Rapid Transit (BRT) configurations, axle loads continue to increase. In addition, engine and transmission retarders are used extensively to supplement braking. All of these factors add up and place greater demands on the axle gearing. To meet these demands, the more robust 71000 Series carrier offers increased capacity while still fitting in the same housing size as the 61000 Series. And, wider gear teeth, with the same overall diameter, translates to increased strength and longer life.

Other premium features include: a unitized bearing package to reduce maintenance and increase bearing life; an improved integral pinion seal design to virtually eliminate seal leaks; and upgraded ring gear differential case joints for added durability.

Quiet Operation

Why have a smoother-operating bus if you can’t have a quieter ride as well? That was the question we answered when our engineers developed Quiet Ride™ gearing. This gearing offers the durability of our high-performance products with a noise level of 9 dBA quieter at the gear set level.

Through enhanced gear manufacturing processes, Quiet Ride creates a more precise and smoother rolling gearset. This helps eliminate aggravation to the other systems in the vehicle, cutting down on potential noise sources. The 71000 Series axles are available with Quiet Ride gearing, providing an even more relaxed riding experience.
**Unitized Wheel End**

The optional Unitized Wheel End contains seals, bearings and specially formulated synthetic grease—all pre-loaded into a single unitized hub assembly. This arrangement reduces wheel-end maintenance and eliminates seal damage at hub installation, wheel seal leaks and the need for future wheel-end adjustments.

Permanently lubricated and sealed, the Unitized Wheel End ultimately translates to improved performance, lower maintenance costs and reduced downtime.

**Better Braking**

As new technology has brought advanced vehicles to the road, transmission retarder loads have increased and brake lining life has improved. With the 71000 Series, brake flexibility has also been enhanced. The standard Cast Plus™ 16.5” x 8.625” S-cam brake drum is stronger and longer lasting. The optional 14.5” x 10” “W” Series cam brake rated to 26,000 lbs. GAWR, also provides improved braking flexibility.

In addition, the 71000 axle was designed to accommodate the Meritor D-Elsa-2 air disc brake, which is the largest air disc brake on the market that can be fitted to a bus axle. This brake features extra thick pads for longer life. A visual pad wear sensor makes it easy for the mechanic to see the remaining lining life without removing the wheel. An optional continuous pad-wear indicator is available, which can be used for precise monitoring of lining life or used with an electronic braking system (EBS).

**Simplified Service**

If a component needs service, ArvinMeritor makes it easy, efficient and reliable. Replacement parts are readily available across North America and all Meritor replacement parts are the same exact parts as used on original equipment assemblies.

**Comprehensive Warranty Coverage**

The 71000 Series is covered by a 2-Year/100,000-Mile warranty with an optional 5-Year/250,000-Mile warranty.

**The Total Performance Solution**

Taking all of these features to the road, the 71000 Series Axle offers improved performance and durability as well as longer life. Add to that less downtime and lower maintenance costs, and it’s clear why the 71000 Series is setting a new standard for the industry.

And, the 71000 Series Axle is only one part of our comprehensive transit bus and coach component offering. Our family of products includes components for the latest vehicle designs as well as traditional applications.