

UNITED STATES INTERNATIONAL TRADE COMMISSION

TAPERED ROLLER BEARINGS FROM CHINA
INV. NO. 731-TA-344 (THIRD REVIEW)

TESTIMONY OF THOMAS TECKLENBURG
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The Timken Company

Good morning. I am Tom Tecklenburg. I am the director for Automotive and Heavy Duty Aftermarket, into which we sell, among other TRBs, the same TRB wheel hub assemblies that are sold to OEMs. At the outset, there is no question that TRB wheel hub assemblies move through the same automotive aftermarket channel of distribution as other TRBs designed for automotive applications, such as single row TRBs.

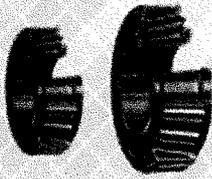
Let me interject here that it is also the case that some TRB wheel hub units, such as the UNIPAC, are sold into the industrial aftermarket for use in industrial and other applications apart from automotive and are also bought for some non-automotive OEM applications. For example, the UNIPAC is sold to wholesale distributors of power transmission products, to OEM customers who produce off-road construction and agricultural equipment, and even aerospace components. Indeed, many of our Gen II and Gen III TRB wheel hub assemblies are also sold in the industrial aftermarket as well as the automotive aftermarket. So, any notion that there is no overlap among the OE and aftermarket channels of distribution for TRB wheel hub assemblies and other TRBs is simply not correct.

All four of the TRB products that Steve reviewed that are used today by OEMs for wheel end applications are also used in the aftermarket for the repair needs of vehicles on the road today, whether they be from 2011 or decades earlier, as may be seen in this slide.

Timken Tapered Wheel Bearing Evolution



**Two Single (TS)
Row Bearings**



*Dodge Ram 1500
4x2 (1948-1999)
4x4 (1956-1993)*



**GEN I
UNIPAC™**



*Dodge Ram 1500
4x2 (2000-2001)*



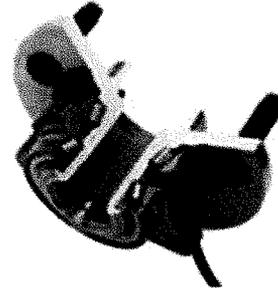
**GEN II
SENSOR-PAC™**



*Chevrolet Silverado 1500
4x2 (1999-current)*



**GEN III SENSOR-PAC™
Self-Retained**

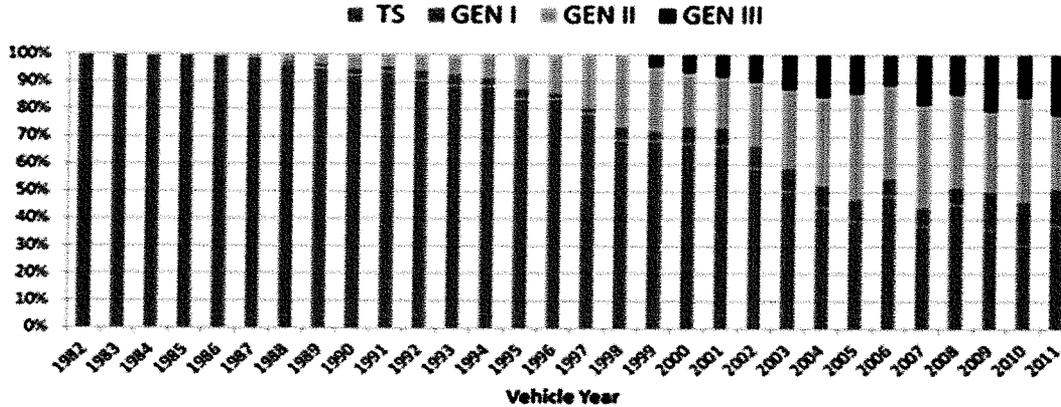


*Chevrolet Silverado 1500
4x4 (1999-current)*

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As this chart shows, single row TRBs have been used in wheel end applications in vehicles for decades.

Tapered Bearing Wheel End Solutions on Light Vehicles in Operation within the US



- Tapered Bearing Wheel End Solutions on Light Vehicles registered within the United States
 - Over 240 million light vehicles registered as of beginning of 2012
 - Data from vehicle years 2011 – 1982
 - Vehicle year 2012 excluded due to incomplete data
 - Chart excludes all non-tapered (ball) product



As recently as 1987, 100 percent of TRB solutions for wheel ends in light vehicles in the United States were a pair of single row TRBs. Thus, for any 1982-1987 vehicle on the road today which has a TRB in its wheel end application, the correct replacement bearings will be the single row TRBs that match what was originally put in the vehicle. In 2011, the last year for which full year data are available, the number of single row tapered roller bearings that were used in new vehicles in a wheel end location was about 40 percent, as seen in this chart in orange. For example, single row TRBs are used for some wheel ends on the Dodge Ram 2500, whether made today or back in 1994. Thus, in the aftermarket, customers looking for an item to repair a damaged wheel end where a TRB solution was designed in will overwhelmingly be looking for single row TRBs for both new and older vehicles. So even if an automotive aftermarket distributor like Pep Boys or Auto Zone

were only carrying TRBs for wheel ends (which is, of course, not the case), the distributor would need to carry both “other TRBs” and TRB wheel hub assemblies.

I can tell you that when I work with automotive distributors to look at inventory needs, part of what we review is the registrations of vehicles still on the road in their service area, the types of TRBs that were designed into the specific vehicles in the vehicle population in the service area, and the anticipated inventory levels of specific TRBs (single row TRB sets or various TRB wheel hub units or assemblies) to achieve a likely 90 – 95% service rate based on vehicle mix, road conditions, and weather. Our automotive distribution customers are looking to carry inventory that will permit them to service the calls from repair centers dealing with vehicle owners with a mechanical problem, including wheel ends. They want and need whatever product will permit the end customer’s need to be served quickly. If a customer needs a set of single row TRBs to solve the wheel end problem on a 2005 vehicle, the automotive distributor is not servicing the customer by offering only a TRB wheel hub assembly, as the package will not be usable by the mechanic to repair the problem. Thus, it cannot be the case that customer perceptions, at least at the distribution level, can be that the products are any more “different” or “similar” than other sets of single row TRBs or other TRB wheel hub assemblies. The only item that will solve the end customer’s need is the exact part number. Period.

This is another way of saying interchangeability is extremely limited for all TRBs within a group or across groups. I understand that the Public Prehearing Report indicates that most domestic producers and importers and all purchasers said that TRB wheel hub

assemblies were not interchangeable with other TRBs. As just reviewed, the same is the case with respect to TRB wheel hub assemblies themselves. For example, one Gen II is not interchangeable with another Gen II that is not the same part number. They are all specifically engineered for particular vehicles and applications. You can visually see that that is true by looking at the samples on the table to my right – the TRB wheel hub assemblies shown are different sizes, and one wouldn't fit the wheel end that the other is intended for and vice versa.

I understand that another factor you consider in your like product analysis is price. I have been told that the Public Prehearing Staff Report indicates that most purchasers reported wheel hub assemblies were priced higher than TRBs of the same size. While certainly you can find situations where the price is lower because it does not have a housing, there are also situations where the TRB price is higher, even without a housing. For example, some Timken personnel went to an auto parts store and purchased a Chinese TRB wheel hub assembly for \$172. It is one of the Gen II or Gen III TRB wheel hub assemblies from China on the table in front of our panel. Compare that product to a Timken single row TRB cone assembly, part number LM11949. I am told that this is Product Number 2 from the pricing data in the Public Prehearing Staff Report. Note that this is not a complete TRB set. It is normally matched up with a cup.

Timken produces many iterations of this cone assembly and the prices for them vary significantly, depending on the tolerances and specifications that the product must meet. Timken's list price for this product from its price catalog, an excerpt of which is in

our prehearing brief, ranges from a few dollars per TRB cone to nearly \$200 per TRB cone. Since the list price of one small cone can be higher than the retail price of a TRB wheel hub assembly, obviously the price of two single row cups and two single row cones (that is, a set) can certainly be higher than a TRB wheel hub assembly with the same size TRB.

Thank you.