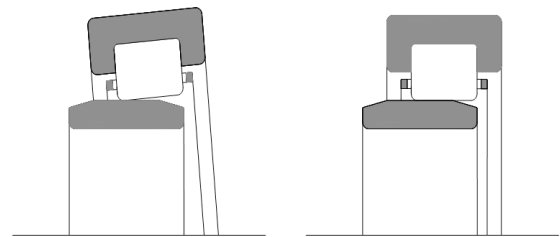
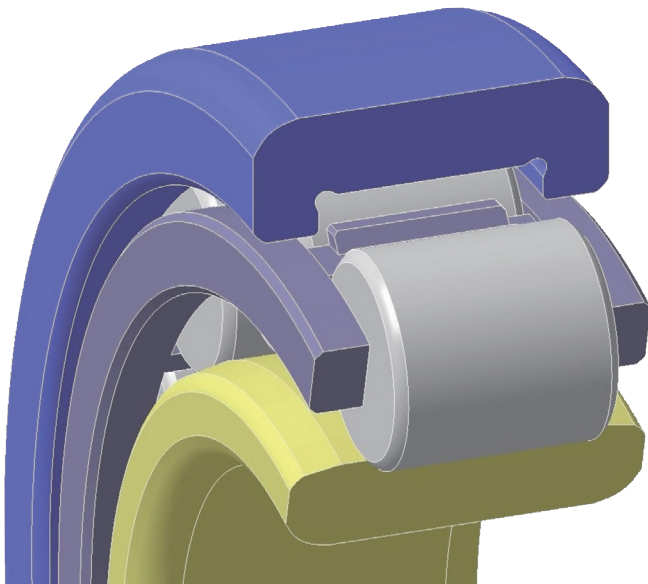


Preventing Raceway/ Roller Damage During Installation



The NU and NJ type cylindrical roller bearings, as well as many machined ring needle roller bearings, facilitate mounting by removing the inner ring. In most instances, the inner ring must be press fitted to the shaft to prevent slippage during operation. By removing the inner ring and heating it, the inside diameter expands allowing the ring to be easily positioned on the shaft. With the outer ring and roller assembly mounted in the housing, the shaft/inner ring can then be inserted under the rollers.

To negate the effect of roller drop, in some cases the shaft can be inserted vertically and rotated as it is inserted to allow the rollers and raceway to properly align. It is also advisable to lubricate the rollers and raceway surface to aid in the insertion. If vertical assembly is not possible, again pre-lubricate the rollers and inner ring raceway and rotate the shaft/inner ring during the insertion allowing the rollers and raceway to align and prevent damage.



Wrong Way

Right Way

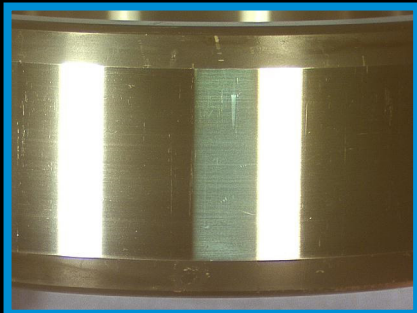
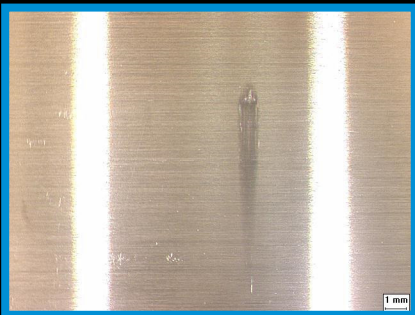
The photos on the back show “plow marks” caused by misalignment of the shaft/inner ring during the insertion process.

There are many different cage designs for these bearings but, in each case, the cage pocket must be of adequate width to allow the roller to turn without wear. When in a horizontal position, gravity causes the roller to “drop” in the pocket, making it difficult to properly align the shaft/inner ring to allow insertion. Any misalignment will cause scoring of the inner ring raceway and as well possibly damage the roller surfaces, also known as “plowing”.

NTN INSIDER



Plow Marks



Beyond Bearings

Training. Installation Support.
Trouble-shooting. And more.

When you choose NTN, your team is equipped with all the necessary tools and resources to get the job done right. From installation to problem-solving, we'll be there with the hands-on support you need to take on your toughest challenges. This includes extra services such as:



Technical Training Unit

On-site, mobile training unit offering specialized, hands-on instruction from NTN engineers



Product Training School

Three days of in-depth instruction from NTN engineers at headquarters
(www.go.ntnamericas.com/trainingschool)



eKnowledge

WEB-BASED TRAINING PROGRAM

Six online product training modules covering different bearing types and nomenclature
(www.ntnamericas.com/eknowledge)



NTN Bearing Finder

Customizable search tool featuring exhaustive data sets, comprehensive part interchanges and interactive CAD drawings
(www.bearingfinder.ntnamericas.com)

Ready to get rolling?

We're here to help you achieve your productivity and performance goals. For more information, contact your NTN Sales Representative or call **1.800.323.2358**. For technical questions, email eng@ntnamerica.com.

NTN BEARING CORPORATION OF AMERICA
1600 E. Bishop Court • Mount Prospect, IL 60056-7604
Tel: 847-298-7500 • Fax: 847-294-1205 • www.ntnamericas.com

18NTNTT001

NTN[®]