

Replacing Cups and Cones Together

Timken recommends replacing the bearing cone (inner race) and bearing cup (outer race) at the same time and that both components come from the same manufacturer.

Avoid Mixing Parts from Different Bearing Manufacturers

Common Problems Caused By Mixing Parts

- Incompatible internal bearing profile
- Overall bearing width difference due to tolerance differences
- Bearing rating differences
- Surface finish variations due to different manufacturing processes and technology
- Steel quality and cleanliness variations
- Steel processing and steel type variations
- Variances in worldwide bearing manufacturing quality

Timken has 56 sets of MileMate® matched wheel bearing sets available for the commercial vehicle industry. (See chart on front and back page for the Timken part number and corresponding set number.)

Choose MileMate Sets Instead of Individual Inner and Outer Races?

A MileMate set is a Timken matched outer race and inner race in a convenient single box.

Convenience: The bearing components are together in one box – meaning less inventory.

Longer Bearing Life: Timken® bearings have contoured profiles on the contact surfaces, which evenly distribute the load helping to optimize performance and life.

Matched Outer and Inner Races: International standards only mandate that the same part numbers have the same basic outside diameter, bore, width and outer race angle. This means that internal geometries and characteristics could vary from manufacturer to manufacturer.

Lower Maintenance Costs: The cost of matched parts is relatively small compared to the cost of unscheduled downtime.

Timken Set Number	Timken Part Number	Common Application Description
Manually Adjusted Wheel Ends		
SET401	580, 572	Industry Standard R Drive Axle - Outer Bearing
SET402	582, 572	Potential R Drive Axle - Outer Bearing (Mack Special Radius)
SET403	594A, 592A	Industry Standard R Drive Axle - Inner Bearing
SET404	598A, 592A	Potential R Drive Axle - Inner Bearing (Mack Special Radius)
SET405	663, 653	Trailer Axle - Inner Bearing / Potential Rear (drive or trailer) Axle - Outer Bearing
SET406	3782, 3720	Industry Standard FF Steer Axle - Outer Bearing
SET407	28682, 28622	Rear Axle - Inner Bearing / Front Steer Axle - Outer Bearing
SET408	39590, 39520	Industry Standard L Drive Axle - Outer Bearing
SET409	45280, 45220	Front Steer Axle - Outer Bearing (Mack)
SET410	45284, 45220	Front Steer Axle - Inner Bearing
SET411	47686, 47620	Industry Standard L Drive Axle - Inner Bearing
SET412	HM212047, HM212011	Potential FF Steer Axle - Inner Bearing / Potential N Trailer Axle - Outer Bearing (bore and radius change)
SET413	HM212049, HM212011	Industry Standard FF Steer Axle - Inner Bearing / Industry Standard N Trailer Axle - Outer Bearing
SET414	HM218248, HM218210	Industry Standard N Trailer Axle - Inner Bearing
SET415	HM518445, HM518410	Industry Standard P Trailer Axle - Inner and Outer Bearing
SET416	45291, 45220	Trailer Axle Bearing
SET417	47890, 47820	Trailer Axle Bearing



Timken Set Number	Timken Part Number	Common Application Description
SET418	H715334, H715311	Front Steer Axle - Inner Bearing
SET419	H715343, H715311	Front Steer Axle - Inner Bearing
SET420	H715345, H715311	Front Steer Axle - Inner Bearing
SET421	HM516449A, HM516410	Rear Axle - Inner Bearing (Mack)
SET422	HM516449C, HM516410	Rear Axle - Inner Bearing (Mack)
SET423	6461A, 6420	Industry Standard FL Steer Axle - Inner Bearing
SET424	555-S, 552A	Industry Standard FL Steer Axle - Outer Bearing
SET425	567, 563	Front Steer Axle - Inner Bearing / Trailer Axle - Inner Bearing / Rear Axle - Outer Bearing (Mack)
SET426	47679, 47620	Rear Axle - Outer Bearing (Mack)
Manually Adjusted / 454-Series for Severe Duty and Wide Single Applications		
SET440*	NP454049, NP454011	Timken 454-Series FF Steer Axle - Inner Bearing / Timken 454-Series N Trailer Axle - Outer Bearing
SET441*	NP454248, NP454210	Timken 454-Series N Trailer Axle - Inner Bearing
SET442*	NP454580, NP454572	Timken 454-Series R Drive Axle - Outer Bearing
SET443*	NP454594, NP454592	Timken 454-Series R Drive Axle - Inner Bearing
SET444*	NP454445, NP454410	Timken 454-Series P Trailer Axle - Inner and Outer Bearing
SET495	NP454280, NP454220	Timken 454-Series Front Steer Axle - Outer Bearing (Mack)
SET496	NP454782, NP454720	Timken 454-Series Front Steer Axle - Outer Bearing
SET497	NP454461, NP454420	Timken 454-Series Front Steer Axle FL - Inner Bearing

Timken Set Number	Timken Part Number	Common Application Description
SET498	NP454555, NP454552	Timken 454-Series Front Steer Axle FL - Outer Bearing
Pre-Adjusted Wheel Ends		
SET427*	NP899357, NP026773	Set-Right FF Steer Axle - Inner Bearing / Set-Right N Trailer Axle - Outer Bearing (ConMet PreSet)
SET428*	NP874005, NP435398	Set-Right FF Steer Axle - Outer Bearing (ConMet PreSet)
SET429*	NP034946, NP363298	Set-Right R Drive Axle - Inner Bearing (ConMet PreSet)
SET430*	NP840302, NP053874	Set-Right R Drive Axle - Outer Bearing (ConMet PreSet)
SET431*	NP965350, NP503727	Set-Right N Trailer Axle - Inner Bearing (ConMet PreSet)
SET432*	NP174964, NP593561	Set-Right P Trailer Axle - Inner and Outer Bearing (ConMet PreSet)
SET433*	NP431952, NP378092	Set-Right FF Steer Axle - Inner Bearing / Set-Right N Trailer Axle - Outer Bearing (Dana LMS)
SET434*	NP555065, NP720703	Set-Right FF Steer Axle - Outer Bearing (Dana LMS)
SET435*	NP568900, NP107783	Set-Right R Drive Axle - Inner Bearing (Dana LMS)
SET436*	NP577914, NP975161	Set-Right R Drive Axle - Outer Bearing (Dana LMS)
SET437*	NP022333, NP250023	Set-Right N Trailer Axle - Inner Bearing (Dana LMS)
SET438*	NP417549, NP156827	Set-Right P Trailer Axle - Inner and Outer Bearing (Dana LMS)
SET439	HM212049X, HM212011	FF Steer Axle - Inner Bearing (Volvo Special Radius)
SET445*	NP294109, NP039695	Timken Set-Right FL Steer Axle - Inner Bearing (ConMet PreSet)
SET446*	NP107091, NP183330	Timken Set-Right FL Steer Axle - Outer Bearing (ConMet PreSet)

Timken Set Number	Timken Part Number	Common Application Description
Pre-Adjusted / 454-Series for Severe Duty and Wide Single Applications		
SET600*	NP454946, NP454298	Timken 454-Series Set-Right R Drive Axle - Inner Bearing
SET601*	NP454302, NP454874	Timken 454-Series Set-Right R Drive Axle - Outer Bearing
SET602*	NP454350, NP454727	Timken 454-Series Set-Right N Trailer Axle - Inner Bearing
SET603*	NP454357, NP454773	Timken 454-Series Set-Right FF Steer Axle - Inner Bearing / Timken 454-Series Set-Right N Trailer Axle - Outer Bearing
SET604*	NP454964, NP454561	Timken 454-Series Set-Right P Trailer Axle - Inner and Outer Bearing
SET605	NP454005, NP454398	Timken 454-Series Set-Right Front Steer Axle - Outer Bearing

⚠ WARNING
Failure to observe the following warnings could create a risk of death or serious injury.

Never spin a bearing with compressed air. The components may be forcefully expelled. Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication. A bearing/component should not be put into service if its shelf life has been exceeded.

CAUTION
Failure to follow these cautions may result in property damage

Use of improper bearing fits may cause damage to equipment.
 Do not use damaged bearings.

TechTips is not intended to substitute for the specific recommendations of your equipment suppliers. Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.