

# Heavy-Duty TechTips

**TIMKEN**  
Where You Turn

Volume 1 • Issue 4 Promoting safe, proper bearing handling practices for the heavy-duty market

Maximizing bearing performance and life remains an objective throughout The Timken Company, from design teams and manufacturing associates to our field sales team and distributors. TechTips helps you install and maintain Timken® bearings, seals and components to take full advantage of their performance and the systems in which they operate. For more information regarding Timken heavy-duty products and services, visit [www.timken.com](http://www.timken.com) or contact your local Timken distributor.

## SERVICING PRE-ADJUSTED WHEEL-ENDS; DOs AND DON'Ts



How you service pre-adjusted wheel-ends will determine how well they perform in the field. To service these wheel-ends and maximize performance, follow the below DOs and DON'Ts. *Note: A pre-adjusted wheel-end can be identified by a spacer between the inner and outer bearings.*

### DOs

**DO** thoroughly clean the hub and all components during routine service intervals or when maintenance is required.



**DO** inspect the seal, bearings, hub and spacer for unusual wear or damage.

**DO** replace the seal whenever the hub is removed from the spindle.

**DO** replace all the bearings (cone assemblies and cups) and the spacer if they exhibit any sign of distress or

damage. Timken recommends that the cups, cones and spacer be replaced together to help maximize performance.

**DO** replace with same type of lubricant or compatible original equipment manufacturer (OEM) approved lubricant.

**DO** follow your hub supplier or OEM's service recommendations and procedures.

**DO** use exact Timken® NP part number replacement bearings with pre-adjusted systems.

### DON'Ts

**DON'T** use the spacer if you are converting your pre-adjusted hub to a traditional adjustable wheel-end system.

**DON'T** use industry standard components for pre-adjusted systems. If replacement parts are required, always use OEM specified service parts to help maximize performance. To make it easier to replace the bearings and spacer together, Timken

has Set-Right™ replacement kit offerings (listed on the backside of this sheet).

**DON'T** reuse components that are damaged or excessively worn, especially the bearings, spacer, seal and spindle nuts.

**DON'T** mix oils and greases.

By following these simple Do's and Don'ts, you will help avoid safety problems and limit the amount of unnecessary wheel-end maintenance.

*Note: Hubs with spacers require that exact NP part number replacement bearings be used to achieve the correct system setting range. Industry standard part numbers may be used only if the spacer is removed and the bearings are manually adjusted.*

**WARNING**  
**Failure to follow these instructions can result in wheel separation, creating a risk of serious bodily injury.**

## Set-Right™ Heavy-Duty Hub Rebuild Kits and Components

FFTC1 - FF Steer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET427*	NP899357	1
Inner half-stand NP cup		NP026773	1
Outer half-stand NP cone	SET428*	NP874005	1
Outer half-stand NP cup		NP435398	1
Spacer**			1

RDTC1 - R Drive Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET429*	NP034946	1
Inner half-stand NP cup		NP363298	1
Outer half-stand NP cone	SET430*	NP840302	1
Outer half-stand NP cup		NP053874	1
Spacer**			1

TNTC1 - N Trailer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET431*	NP965350	1
Inner half-stand NP cup		NP503727	1
Outer half-stand NP cone	SET427*	NP899357	1
Outer half-stand NP cup		NP026773	1
Spacer**			1

TPTC1 - P Trailer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Half-stand NP cone	SET432*	NP174964	2
Half-stand NP cup		NP593561	2
Spacer**			1

FLTC1 - FL Steer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET445*	NP294109	1
Inner half-stand NP cup		NP039695	1
Outer half-stand NP cone	SET446*	NP107091	1
Outer half-stand NP cup		NP183330	1
Spacer**			1

RDTC2 - 454-Series™ R Drive Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET600*	NP454946	1
Inner half-stand NP cup		NP454298	1
Outer half-stand NP cone	SET601*	NP454302	1
Outer half-stand NP cup		NP454874	1
Spacer**			1

TNTC2 - 454-Series™ N Trailer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Inner half-stand NP cone	SET602*	NP454350	1
Inner half-stand NP cup		NP454727	1
Outer half-stand NP cone	SET603*	NP454357	1
Outer half-stand NP cup		NP454773	1
Spacer**			1

TPTC2 - 454-Series™ P Trailer Kit			
Kit Contents	MileMate® P/N	Component P/N	Qty
Half-stand NP cone	SET604*	NP454964	2
Half-stand NP cup		NP454561	2
Spacer**			1

\* Includes proprietary Timken part numbers  
 \*\* Spacer not sold separately

### **⚠ WARNING** Failure to follow these warnings could create a risk of serious bodily injury.

Proper maintenance and handling practices are critical. Failure to follow installation instructions and to maintain proper lubrication can result in equipment failure.  
 Never spin a bearing with compressed air. The rolling elements may be forcefully expelled.

### **CAUTION**

Prior to retrofitting or rebuilding your existing pre-adjusted wheel-end, you must start with the proper hub. Hubs designed for use with the Set-Right kits have special internal tolerancing that helps achieve maximum performance. Contact your hub supplier if you are unsure. The use of a standard hub will create an undesirable setting range, which may result in component damage.

*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.*

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