

# Performance Hub Racing Kits

# TIMKEN

## Upgrade Your Hubs - Get The Timken Advantage

### KIT COMPONENTS FEATURES AND BENEFITS



#### Quality Timken® bearings

- Engineered exclusively for performance racing hubs
- True rolling motion conserves energy and generates less heat
- Enhanced surface finish reduces friction
- Special profiles improve performance



#### Minimal torque, labyrinth seal

- Non-contacting seal designed specifically for performance racing hubs
- Lower torque (minimal torque) = more horsepower
- Lower heat generation = lower operating temperature
- No wear pattern = longer axle life
- Allows stabilization of system pressure due to over greasing



#### Timken performance racing grease

- Specially formulated for the rigors of racing
- Broad operating range: -40° F to 350° F (-40° C to 177° C)
- Provides enhanced protection against wear, rust and corrosion
- Synthetic PAO (polyalphaolefin) ISO 220 enables greater bearing roller traction (less slippage)



### WE UNDERSTAND THE PASSION OF WEEKEND RACERS

In a world where the difference in a top finish is measured in fractions of a second, increased horsepower delivered to the wheels can make all the difference. And our Performance Hub Racing Kits can help.

### WE'VE LOGGED PLENTY OF RACING MILES

In 1911, when Ray Haroun drove to victory in the first Indianapolis 500, Timken was there. Timken bearings spun in the axles of Haroun's Indy-winning Marmon Wasp. Today, new Timken technologies continue to add value to modern race teams. Example: Timken introduced RacePac™ packaged wheel bearings, used by many of the

top race teams in the prestigious Nextel Cup Series, including Joe Gibbs Racing, which has a technical partnership with Timken. Building upon this and similar successes, Timken engineers developed Performance Hub Racing Kits.

There's good reason why race teams turn to Timken to gain a competitive edge. Of all the major racing series in the world, more series are won on Timken products than all competing brands. Whether it's NASCAR, the Indy Racing League or local weekend racing circuits, Timken provides teams with innovative, race-proven products to succeed.

## FRICITION MANAGEMENT SOLUTIONS

Weekend racers count on Timken to deliver outstanding products and services. Simply put, Timken offers friction management solutions that deliver unparalleled value and innovation.

### Bearings

Since Henry Timken patented the tapered roller bearing in 1898, The Timken Company has been recognized as a worldwide leader in the manufacturing of highly engineered bearings. Our extensive research capabilities provide a solid foundation for continued product development for the racing community.



### Seals

While Timken is known for its top-quality bearings, the company also has an impressive history of designing top-quality seals. Integral to bearing performance, Timken is proud of its numerous patented seals, which are made in some of world's most advanced manufacturing plants.



In their charge to fight friction, Timken engineers developed a patented labyrinth seal design for performance racing hubs. This proprietary, non-contacting seal provides the following advantages over current elastomer lip (contacting) seal designs:

#### > Labyrinth Design

- Lower torque (minimal torque) = more horsepower
- Lower heat generation = lower operating temperature
- No wear pattern = longer axle life
- Allows stabilization of system pressure due to over greasing

#### > Polyurethane Seal Material (vs. Nitrile - commonly used in existing seals)

- Less grease absorption

#### > OD coating

- Formulated to compensate for minor imperfections in the seal housing



### Grease

Applying the correct grease is essential to the successful performance of any bearing. Leveraging our knowledge of tribology (the study of friction, lubrication and interacting surfaces), we've specially formulated our performance racing grease for the extreme operating conditions of bearings in racing hubs:

#### > NLGI GC – LB certified; exceeds performance rating

#### > Wide operating temperature range: -40° F to 350° F (-40° C to 177° C)

#### > Special additives provide enhanced protection against wear, rust and corrosion

#### > Synthetic PAO (polyalphaolefin) ISO 220 enables greater bearing roller traction (less slippage) resulting in:

- Reduced operating temperature
- Extended bearing fatigue life
- Improved wheel torque efficiency

## GAIN A WINNING EDGE

Timken products enable motorsports competitors to extract every last fraction of power to gain a winning edge. Our Performance Hub Racing Kits are no exception. They provide everything weekend racers need to install new hub components in one convenient

package – and a better chance of making it to the winner's circle.

**To learn more, contact your Timken sales representative.**

## KITS AND COMPONENTS

APPLICATION: WIDE 5.....Part# PRK 1		
Kit Contents		Qty
Inner Bearing Set		1
Outer Bearing Set		1
Seal		1
4 oz. Performance Racing Grease		1
Components Sold Separately		
Part No.	Description	Std Unit Pack*
SETW51	Inner Bearing Set	1
SETW52	Outer Bearing Set	1
541305K	Includes 2 Seals	1
GR246T	4 oz. tube, must be ordered in multiples of 50	50
GR246C	14 oz. cartridge, must be ordered in multiples of 10	10
* Sold in standard package quantity only		

APPLICATION: 5 X 5.....Part# PRK 2 †		
Kit Contents		Qty
Inner Bearing Set		1
Outer Bearing Set		1
Seal		1
4 oz. Performance Racing Grease		1
Components Sold Separately		
Part No.	Description	Std Unit Pack*
SET552	Inner Bearing Set	1
SET552	Outer Bearing Set	1
5X5SLK	Includes 2 Seals	1
GR246T	4 oz. tube, must be ordered in multiples of 50	50
GR246C	14 oz. cartridge, must be ordered in multiples of 10	10
* Sold in standard package quantity only † Available 2nd Quarter 2007		

# TIMKEN

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, gears, belts, chain and related mechanical power transmission products and services.

Stronger. Commitment. Stronger. Value. Stronger. Worldwide. Stronger. Together. | Stronger. By Design.

[www.timken.com](http://www.timken.com)