

## UNDERCARRIAGE OPTIONS

# CAT<sup>®</sup> UNDERCARRIAGE OPTIONS FOR SMALL, MEDIUM, AND LARGE EXCAVATORS





# MORE THAN THE RIGHT CHOICE... THE BEST CHOICE

**Every customer, every job, every machine—every choice you make has an impact on your business. Your success rides on choosing the equipment and tools that deliver the best productivity, durability, and value for your applications.**

We offer more undercarriage options for your Cat® machines than any other manufacturer because we know that the more precisely you match iron to application, the more effective and efficient your work will be. Whether you're looking for the lowest upfront cost, longer wear life or lower operating costs per hour, we have the right undercarriage solution for your business.

Every Cat Undercarriage is designed by Caterpillar engineers and built to exact specifications based on the real-world experience of our customers. And our Undercarriage systems come with industry-leading warranties, so when you choose a Cat Undercarriage you know it's not just the right choice, it's the best choice.

## HYDRAULIC EXCAVATOR COMPATIBILITY



**MODEL  
NUMBER**

	<b>GENERAL DUTY</b>	<b>HEAVY DUTY</b>	<b>HEAVY DUTY XL</b>
<b>311-313</b>	•	•	
<b>315-326</b>	•	•	•
<b>330-345</b>	•	•	
<b>349-352</b>	•	•	•
<b>365-395</b>	•		•



# UNDERCARRIAGE SELECTION MATTERS

**One of the most important factors in helping you achieve the lowest owning and operating costs and maximizing equipment uptime is matching the right undercarriage option to your specific machine model and work application.**

Your Cat dealer has the knowledge and tools to help you choose the best undercarriage configuration for your equipment and your job. When consulting with you, dealers use these tools and take key factors into account to recommend proven Cat components to help you get the job done.

## KEY SELECTION FACTORS TO CONSIDER

### TRACK FRAME CONFIGURATION

Standard (STD), Long (L), Long Narrow (LN), Reduced Radius (RR), Long Reduced Radius (LRR)

### WIDTH OF TRACK SHOES

Narrow, intermediate or wide

### UNDERFOOT CONDITIONS

Light, moderate or severe abrasion and impact

### TERRAIN

Slope conditions, size and type of material

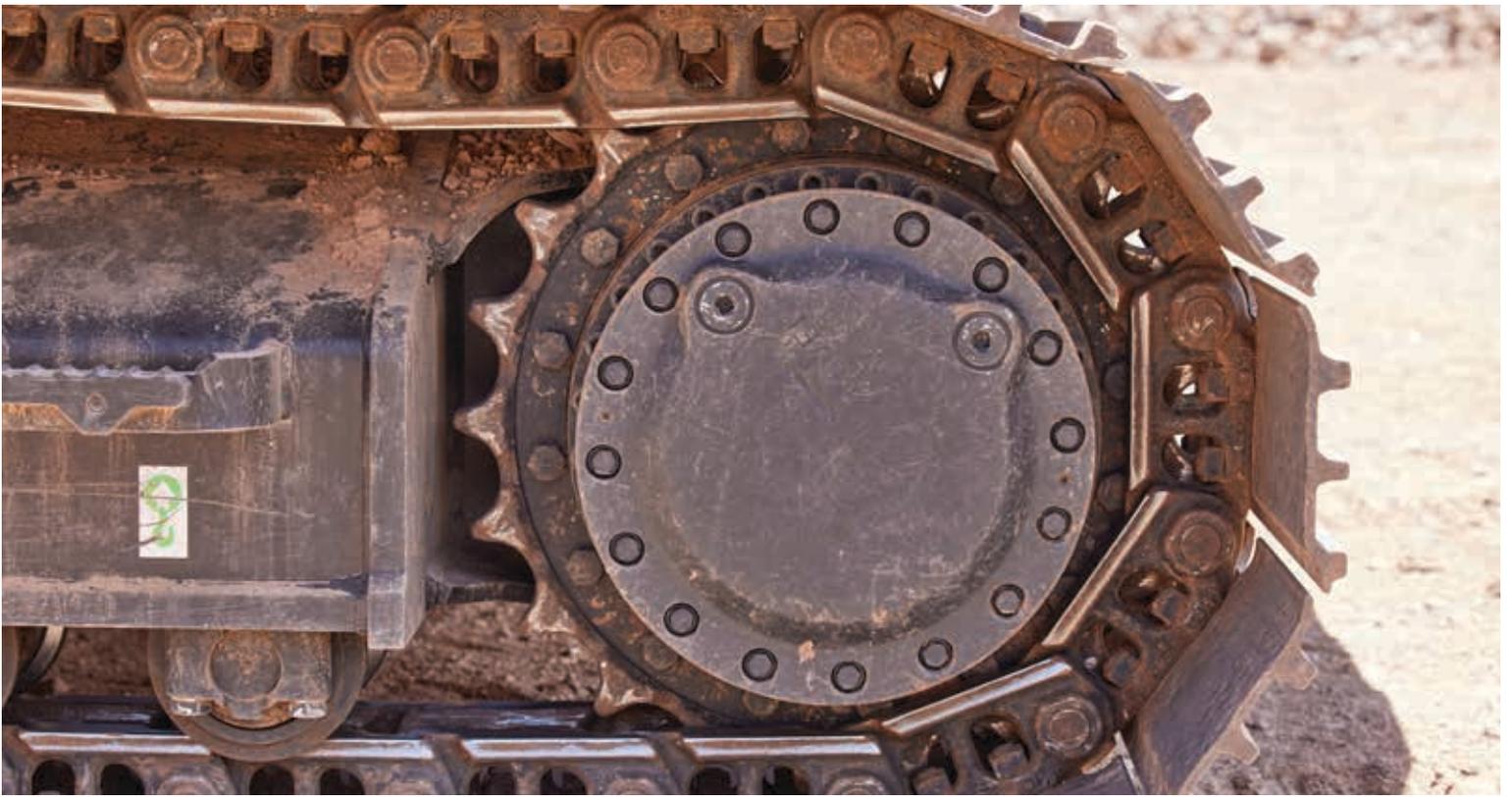
### PACKING CONDITIONS

Operating in extrudable materials, which can usually be squeezed out from between track parts when wet, for example, clay soils

Operating in non-extrudable materials, which can't be extruded from the link windows and track shoe center holes of most undercarriage tracks, for example, branches

### APPLICATION

Digging, hammering, or moving rocks



## WHAT IS THE BEST FIT FOR YOU?

**Your work environment is the most important element in selecting undercarriage to meet the demands of your business and your budget. Answering the following questions will help you choose the right Cat Undercarriage for your business:**

- + How long will I own this machine?
- + How many hours a week will I be using this machine?
- + What are my typical ground/soil conditions?
- + What are my impact conditions?
- + What attachments are on my excavator?
- + What are the grades/slopes on my job site?



**The more precisely you define these parameters, the more effective your choice will be.**



# CAT GENERAL DUTY TRACK

## PERFORMANCE YOU CAN COUNT ON

We recommend General Duty undercarriage, a Grease Lubricated Track (GLT), for your low-to-moderate impact applications where the elevated performance of the Cat Heavy Duty track undercarriage is not needed.



### INTERCHANGEABLE COMPONENTS

While General Duty track is built to different specifications than Heavy Duty, we design it so General Duty and Heavy Duty components are interchangeable. That eliminates any need for retrofitting and keeps your machine downtime to a minimum. Additionally, Cat Heavy Duty shoes can be installed on General Duty link assemblies, making them more flexible to meet your needs.



### PARTS WHEN YOU NEED THEM

Your Cat dealer has General Duty parts stocked and available for fast turnaround, keeping you and your machine working.



### A VARIETY OF OPTIONS

A variety of track shoe options are offered for General Duty. In addition to undercarriage components, track shoe selection can impact traction and flotation as well as overall undercarriage wear life. For the conditions in which General Duty Undercarriage will typically operate, moderate service shoes offer optimal performance and wear life. (General Duty Hydraulic Excavator preassembled track groups are available from your dealer.)



**General Duty is covered by Cat Undercarriage Assurance. Ask your Cat dealer for details.**

# CAT HEAVY DUTY UNDERCARRIAGE

**Undercarriage designed and built by Caterpillar to deliver longer wear life and lower owning and operating costs.**

In most tough underfoot conditions, Heavy Duty track extends your undercarriage system life up to 30 percent more than Cat General Duty, with the greatest benefits realized in medium impact and medium travel applications such as:

- + **Heavy Construction**
- + **Pipe Laying**
- + **Demolition**
- + **Scrap Handling**
- + **Forestry**

Each track joint is sealed to retain the grease between the pin and bushing to minimize internal wear with our Grease Lubricated Track (GLT) technology.





## CAT HEAVY DUTY XL TRACK

### **Maximum durability in tough conditions with extended wear life and lower operating costs**

Proven Cat Heavy Duty design with the addition of stronger Duralink and Positive Pin Retention 2 (PPR2) achieves best results in high-impact and high-travel applications such as mining, heavy construction, pipe laying, demolition, and scrap handling.

PPR2 is an exclusive Caterpillar offering that mechanically locks the link to the pin to handle the toughest conditions.



### **INCREASED TRACK LIFE**

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Resists pin walking and link cracking for reliable sealing and maximum track life



### **LONGER WEAR CYCLE**

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Tightly controls seal motion for long internal pin/bushing wear life



### **STRONGER TRACK LINKS**

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Resists fatigue & crack formation with redesigned, stronger track links

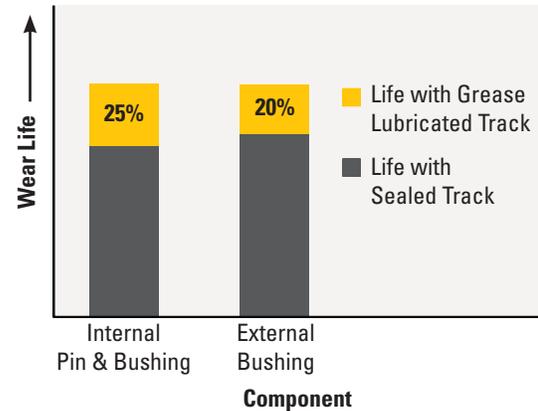
# UNDERSTANDING LUBRICATION

## GREASE LUBRICATION

**The internally greased pin and bushing with seals offers several benefits over sealed track.**

- + Eliminates internal pin and bushing wear until the lubricant is lost. See graph.
- + Minimum 25% increase in internal wear life due to less pin and bushing wear.
- + Improves sprocket wear life because sprocket and link assembly pitch remains matched for a longer period of operation.
- + Track noise is reduced because there is no metal-to-metal contact between the pin and bushing.
- + Allows for enhanced undercarriage management opportunities.

### INCREASED WEAR LIFE WITH GREASE LUBRICATED TRACK UNDERCARRIAGE

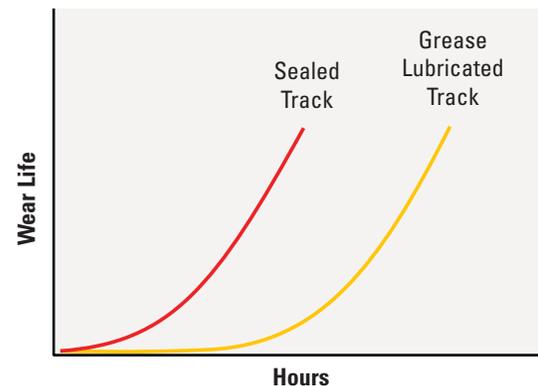


Increased wear life of pin and bushing means more sprocket and link life is utilized.

## LARGER BUSHING

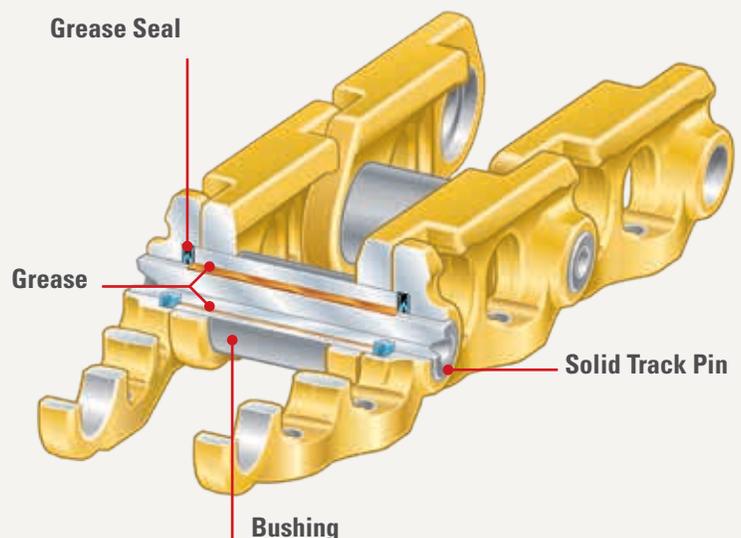
**The outer diameter of the bushing has been increased for Grease Lubricated Track and offers many benefits.**

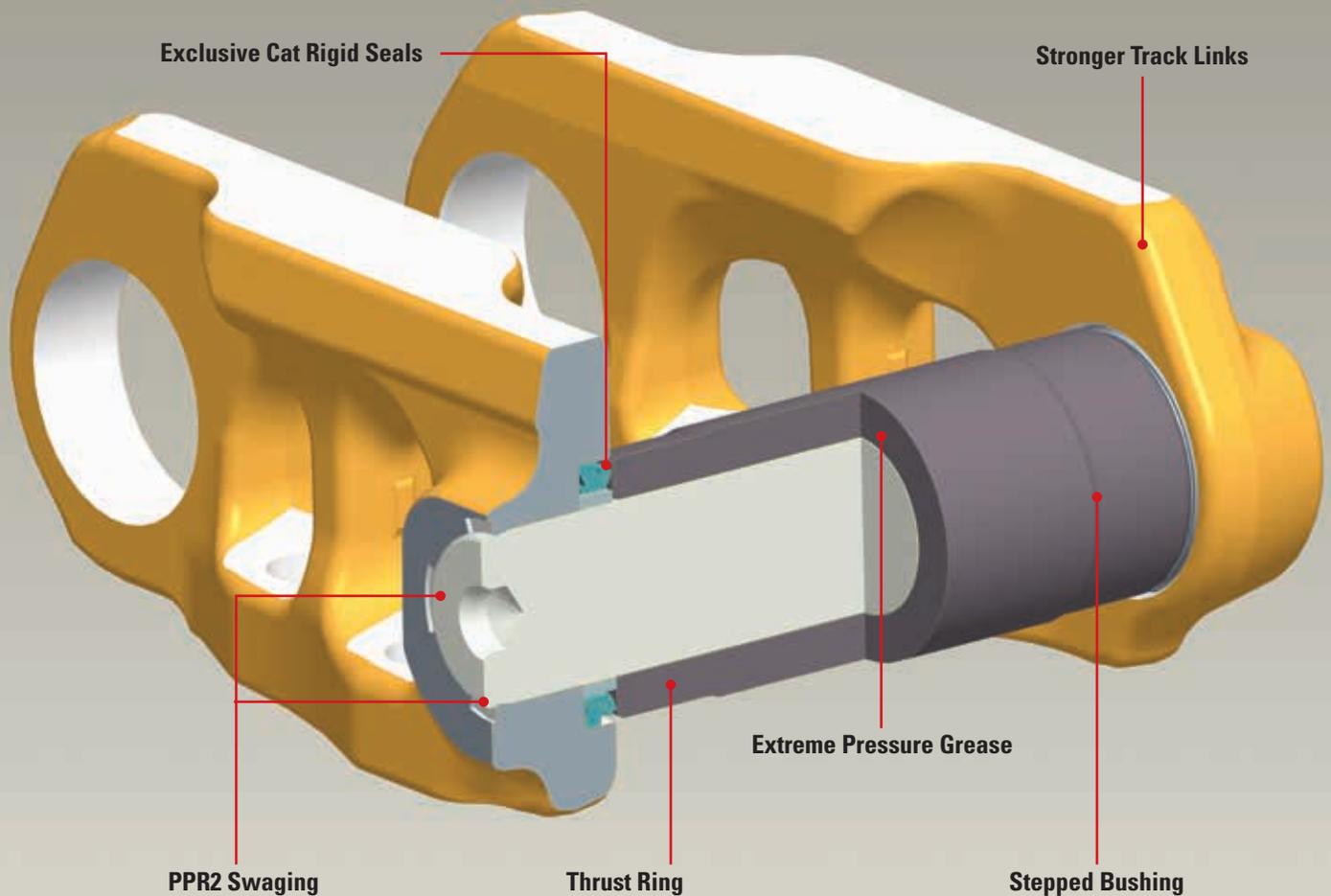
- + Increases external wear life by 20% or more. See graph.
- + Link life, normally limited by bushing wear, is better utilized because internal and external bushing wear life is extended.
- + Overall system wear life is enhanced by 25% or more due to the combined improvements of internal wear, external wear and sprocket wear.



**With Grease Lubricated Track, internal wear is eliminated until the grease dissipates from the line assembly.**

Without Grease Lubricated Track, internal pin and bushing wear begins immediately because of contact and friction between the two parts. Grease Lubricated Track contains grease between the pin and bushing to eliminate the contact and friction wear elements. This results in a significant increase of internal wear life of the link assembly.





## EXCLUSIVE DESIGN MAXIMIZES TRACK LIFE AND COMPONENT REUSE

PPR2 Track features specially machined links, and pins with a radial groove. During assembly, link material is pressed into the groove between the link and pin. This locks the joint with the correct amount of end play.

- + Prevents outward movement of the link on the pin
- + Keeps end play within the optimum range for sealing
- + Contains the grease and excludes the debris for as long as possible

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PPR2 is especially recommended for mining, heavy construction, pipe laying, demolition, and scrap handling. Any application with high impact and/or travel rates will apply high loading and twisting forces into the track chain. That's when you need PPR2 most. PPR2 should also be considered for machines equipped with wide or single grouser shoes.

# CLAMP MASTER FOR HYDRAULIC EXCAVATORS

**Dig deeper & save time and money with a clamp master design that makes track installation safer and easier.**

Caterpillar's new Clamp Master saves you time and money by making track installation on most models of Cat Hydraulic Excavators safer and easier than ever. The improved clamping master track link assembly replaces both slip style and press fit joints. With this innovative design, use of a portable field press is unnecessary—which means you get back to work faster.



## INCREASED SERVICEABILITY

Improved master joint that addresses durability and serviceability in a single design



## STRONGER PIN RETENTION

25% better pin retention than a press fit master, removing the risk of damage to the cotter pin



## NO SPECIAL TOOLS

Eliminates the need for a portable field press. No special master pin required for track master link.



## WIDE APPLICATION

Available for any standard hydraulic excavator in 7.5" pitch size class (315-326)



# CAT UNDERCARRIAGE SUPPORT

## COMPREHENSIVE SUPPORT

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To help you get the most from your Cat Undercarriage, Caterpillar and Cat dealers are dedicated to providing you with global service and support for all undercarriage configuration options—from advanced diagnostics to worldwide parts delivery.

## UNDERCARRIAGE ASSURANCE PROGRAMS

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Our Undercarriage Assurance Programs were developed to demonstrate our commitment to provide you the lowest cost-per-hour undercarriage systems. Assurance Programs offer you support beyond the standard new machine or parts warranties. They cover all major moving undercarriage components on Cat track-type tractors, track-type loaders and track-type hydraulic excavators.

See your Cat dealer for full details about coverage for specific undercarriage configuration options.

## CUSTOM TRACK SERVICE (CTS)

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An improperly managed undercarriage can cause downtime and account for more than half of machine maintenance costs. That's why we use the most advanced diagnostic equipment available to provide Custom Track Service (CTS) for maintaining your undercarriage system.

With CTS, we can accurately monitor undercarriage performance and predict wear rates so you can evaluate service options, plan maintenance, and fit downtime into your schedule. And because CTS analysis can be completed on the job site, you can make informed decisions that keep your operating costs as low as possible, without sacrificing uptime.

## WORLDWIDE PARTS AVAILABILITY

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Our industry-standard parts distribution network makes most new parts available to you anywhere in the world, usually within 24 hours.



# UNDERCARRIAGE

## CONSULT WITH YOUR CAT DEALER TODAY

We offer you the right parts and service solutions, when and where you need them.

The Cat dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.