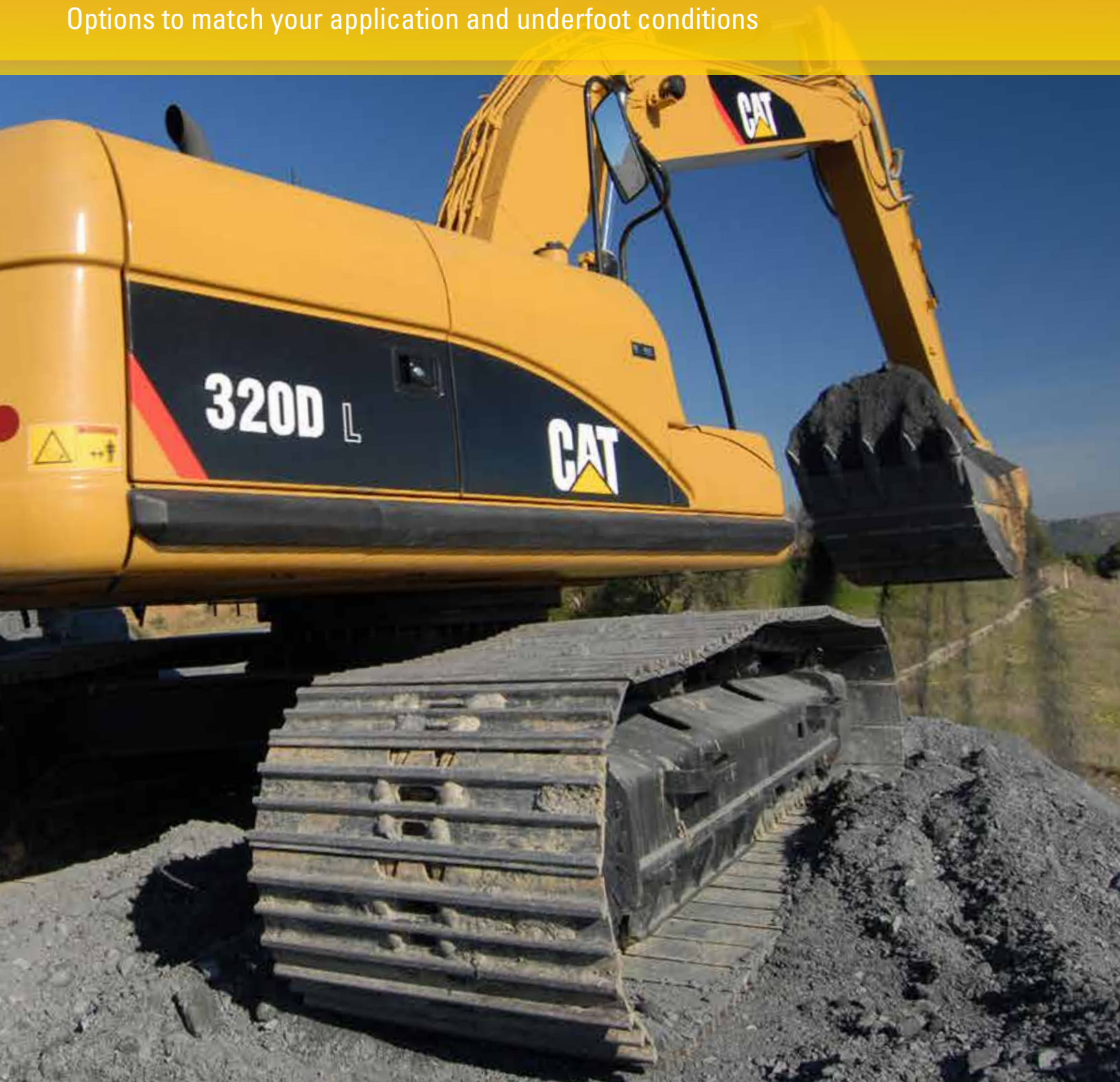


CAT® UNDERCARRIAGE

# ALL THE RIGHT CHOICES

Options to match your application and underfoot conditions



HYDRAULIC EXCAVATORS



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

Every customer, every job, every machine—every choice you make has multiple impacts. Your success rides on looking at the possibilities and choosing what delivers the best productivity, durability and value in a given application.

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. And, that builds a stronger bottom line.

Every Cat Undercarriage is designed by Caterpillar engineers and built to exacting specifications based on the real-world experience of our customers. So, when you choose a Cat Undercarriage, you know it's not just the right choice, it's the best choice.

**BUILT FOR IT.™**





# UNDERCARRIAGE SELECTION MATTERS

One of the most important factors in helping you achieve the lowest owning & 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 undercarriage knowledge and selection tools to help ensure you choose the best option for your equipment and your job. When consulting with you on options, dealers use these tools while taking key factors into account to identify your best-fit undercarriage configuration.

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## Key Selection Factors to Consider

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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	Side slopes, ground objects and V-ditching
Packing Conditions	Operating in extrudable materials, which can usually be squeezed out from between track parts when wet, e.g., 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, e.g., branches
Application	Digging, hammering, or moving rocks



## What is the Best Fit for You?

Your work experience is the most important element in selecting the Cat Undercarriage that best meets the demands of your business. To figure out exactly which Cat Undercarriage is the right fit for your work and your machine, you have to ask questions:

- 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 are the grades/slopes on my job site?
- What level of packing do I expect?

The more precisely you can define these parameters, the more effective your undercarriage choice will be. In the Undercarriage Selector Chart, you'll find information that will help you choose the Cat Undercarriage that's just the right fit for your work and your budget.

## HEX Undercarriage Selection Guide

Rating Key	Man			Material				Machine	
	Purchase Price <sup>1</sup>	Ownership Period <sup>2</sup>	Machine Utilization <sup>3</sup>	Abrasion <sup>4</sup>	Impact <sup>5</sup>	Moisture <sup>6</sup>	Packing <sup>7</sup>	Machine Weight <sup>8</sup>	Shoe Width <sup>9</sup>
<b>○ =GOOD</b> <b>◐ =BETTER</b> <b>● =BEST</b>									
<b>Grease Lubricated Track (GLT)</b> Available on 315-390	◐	●	◐	●	◐	◐	◐	◐	◐
<b>General Duty</b> Available on 320	●	◐	◐	○	○	○	◐	○	○
<b>Positive Pin Retention 2 (PPR2)</b> Available on 345/349, 365/374, 385/390	○	●	●	●	●	◐	●	●	●

<sup>1</sup> **Purchase Price** - Lowest initial price

<sup>2</sup> **Ownership Period** - As this extends, which offering provides the best value

<sup>3</sup> **Machine Utilization** - As the machine usage increases, which undercarriage delivers the best value

<sup>4</sup> **Abrasion** - As abrasion increases, what undercarriage provides the best wear life

<sup>5</sup> **Impact** - As impact increases, which undercarriage provides the best performance

<sup>6</sup> **Moisture** - As moisture increases wear life typically decreases. So which undercarriage is best suited for this scenario

<sup>7</sup> **Packing** - When the application goes from extrudable material to non-extrudable material which undercarriage is best

<sup>8</sup> **Machine Weight** - As machine weight increases, which undercarriage best handles the elevated weight

<sup>9</sup> **Shoe Width** - As shoe width increases, which undercarriage handles the increased bending stress the best

# CAT GREASE LUBRICATED TRACK

## IMPROVE UNDERCARRIAGE LIFE ON YOUR EXCAVATORS

Each track joint is sealed to retain the grease—between the pin and bushing—to minimize internal wear.

Grease Lubricated Track will:

- Improve internal wear life by 25% or more over Sealed Track
- Decrease undercarriage noise
- Allows for enhanced undercarriage management opportunities



## Grease Lubrication

The internally greased pin and bushing with seals offers several benefits over Sealed Track.

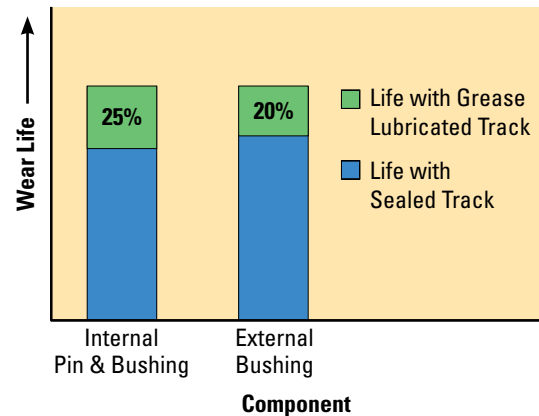
- Eliminates internal pin and bushing wear until the lubricant is lost. See graph.
- Minimum 25% increase in internal wear life because of less pin and bushing wear.
- Improves sprocket wear life because sprocket and link assembly pitch remains matched for a longer period of operation.
- Track noise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

## Larger Bushing

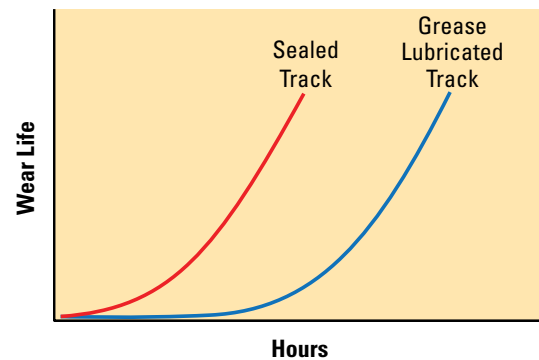
The outer diameter of the bushing has been increased for Grease Lubricated Track and offers many benefits.

- 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.

## Increased Wear Life with Grease Lubricated Track Undercarriage



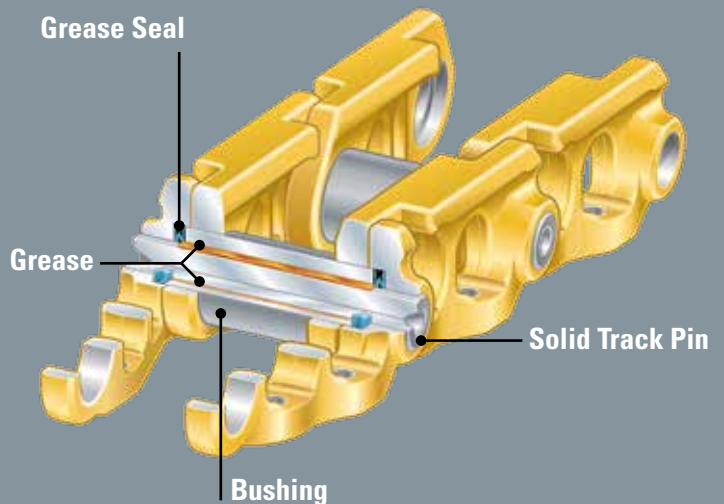
Increased wear life of pin and bushing means more sprocket and link life is utilized.



With Grease Lubricated Track, internal wear is eliminated until the grease dissipates from the line assembly. Wear begins immediately with Sealed Track.

With sealed 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.

Grease Lubricated Track link assemblies are direct replacements for sealed link assemblies on Cat Hydraulic Excavator models.



# CAT POSITIVE PIN RETENTION 2 (PPR2) TRACK

FOR USE ON 345/349, 365/374, AND 385/390 HYDRAULIC EXCAVATORS

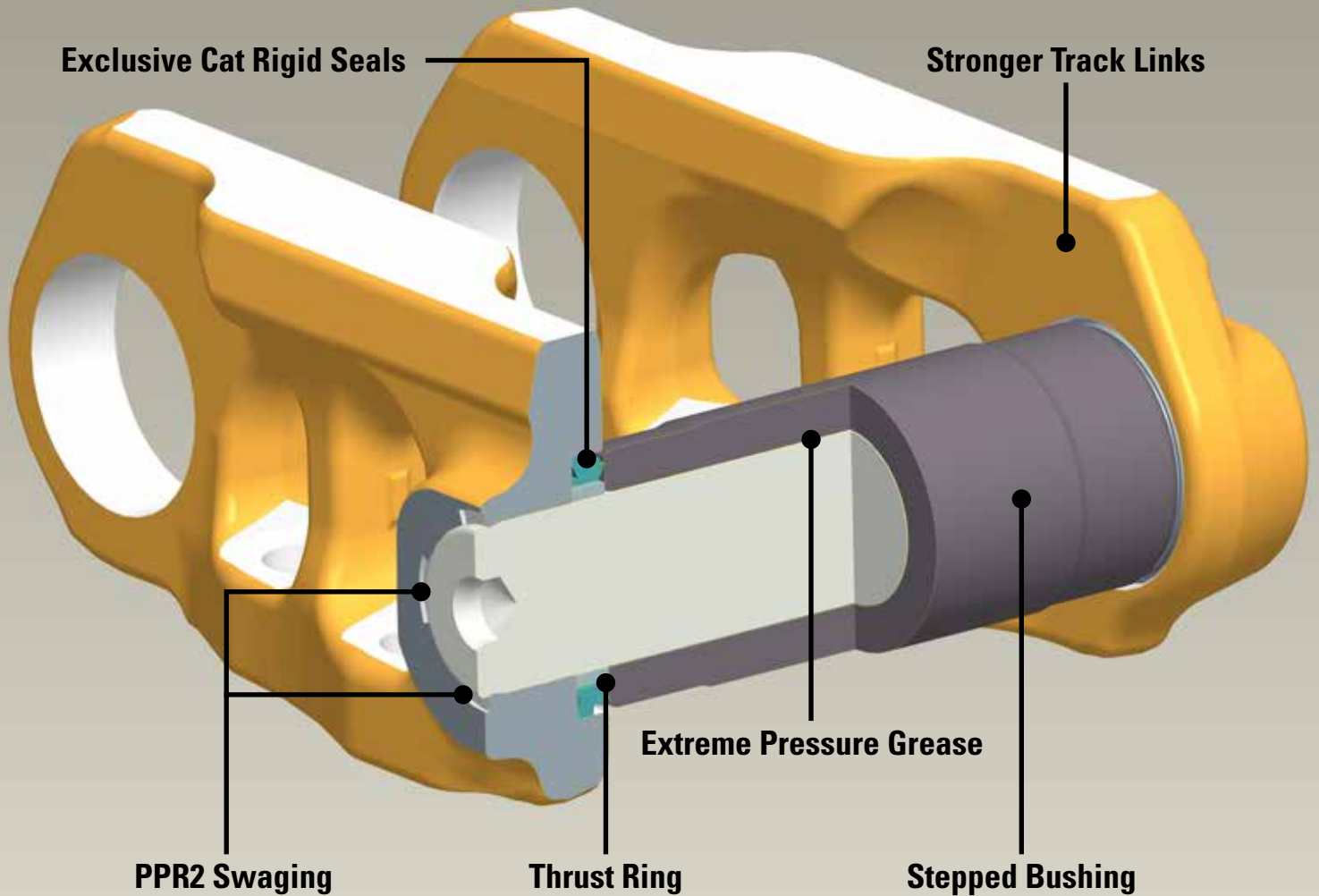
RESISTS PIN WALKING AND LINK CRACKING FOR RELIABLE SEALING AND MAXIMUM TRACK LIFE

Designed for high-impact and high-travel applications such as mining, heavy construction, pipe laying, demolition, and scrap handling. Positive Pin Retention 2 (PPR2) Track is an exclusive Caterpillar offering that mechanically locks the link to the pin.

- Resists end-play generation and link movement on the pin
- Tightly controls seal motion for long internal pin/bushing wear life
- Resists fatigue & crack formation with redesigned, stronger track links







## **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

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, and could benefit from PPR2. Machines equipped with wide or single grouser shoes should also consider PPR2.

# CAT GENERAL DUTY TRACK

## PERFORMANCE YOU CAN COUNT ON

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

- While General Duty is built to different specifications than GLT, its design makes General Duty and GLT components interchangeable, eliminating any need for retrofitting and keeping downtime to a minimum. Cat GLT shoes can be installed on General Duty link assemblies to meet various customer requirements.
- Your dealer has excellent General Duty parts availability for fast turnaround time.
- General Duty offers a variety of track shoe options. 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 will be available from your dealer.)
- General Duty is covered by Cat Undercarriage Assurance. Ask your Cat dealer for details.





# COMPREHENSIVE SUPPORT

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

## Undercarriage Assurance Programs

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)

An improperly managed undercarriage can account for more than half of machine maintenance costs. That's why we provide Custom Track Service (CTS), our comprehensive program for managing your undercarriage system, which uses the most advanced diagnostic equipment available, like the Ultrasonic Wear Indicator.

With CTS, we can accurately monitor undercarriage performance and predict wear rates, so you can evaluate service options, plan your maintenance, and schedule downtime. Overall, CTS analysis, which can be completed on your job site, helps you make informed decisions that keep your operating costs as low as possible.

## Worldwide Parts Availability

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

## Consult with Your Cat Dealer Today

Your Cat dealer has the undercarriage expertise and selection tools to assist in assessing your undercarriage configuration options. So you'll want to consult with your dealership to verify which option is the right undercarriage choice for you—the choice that best suits your machine and application and also offers you the right fit to meet your owning and operating needs.



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