# ALL THE RIGHT CHOICES cat® undercarriage

#### **MEDIUM TRACK-TYPE TRACTORS** Options to match your application and underfoot conditions



# 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<sup>®</sup> 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.

### LET'S DO THE WORK."





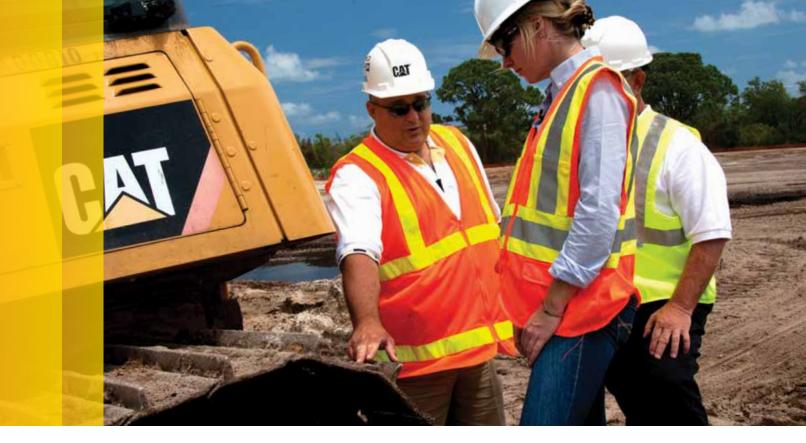
# UNDERCARRIAGE SELECTION MATTERS

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.

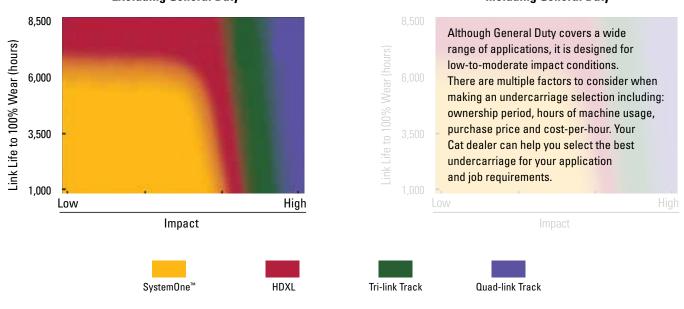
#### **Key Selection Factors to Consider**

Track Frame Configuration	Standard, Extended (L) (XL), Extra Wide (XW), Low Ground Pressure (LGP)		
Width of Track Shoes	Narrow, intermediate or wide Tri- and Quad-link Track configurations		
Type of Track Shoe	Extreme Service (ES), Moderate Service (MS), Self-Cleaning, Center Hole, Chopper		
Blade Type	Variable-pitch Power Angle/Tilt (VPAT), Semi-Universal (SU), Angle, Straight		
Rear Attachment	Winch, Ripper, Counterweight, Drawbar		
Other Attachments	Sweeps, Window Guarding		
Underfoot Conditions	Light, Moderate or Severe Abrasion and Impact		
Terrain	Side Slopes, Ground Objects and V-ditching		
Packing Conditions	Operating in extrusive materials, which can usually be squeezed out from between track parts when wet, e.g., clay soils		
	Operating in non-extrusive materials, which can't be extruded from the link windows and track shoe center holes of most undercarriage tracks, e.g., branches		



#### **UNDERCARRIAGE APPLICATION GUIDE**

Life/Impact Matrix



#### **Excluding General Duty**

#### Including General Duty

#### **COST-PER-HOUR ANALYSIS**

Dealers use undercarriage tools to run cost-per-hour scenarios to help determine which undercarriage option is the best fit for your business requirements. So be sure to consult with your Cat dealer to select the right undercarriage solution for the job—and your bottom line.

## FIND THE RIGHT UNDERCARRIAGE

We've been helping customers find the best undercarriage for their job requirements for over a century—longer than anyone else in the business. You get the benefits of that experience.



## WHAT IS THE BEST FIT FOR YOU?

Your work experience is the most important element in selecting undercarriage to meet the demands of your business and your budget. To choose the Cat Undercarriage that's just 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 attachments are on my track-type tractor?
- What are the grades/slopes on my job site?

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

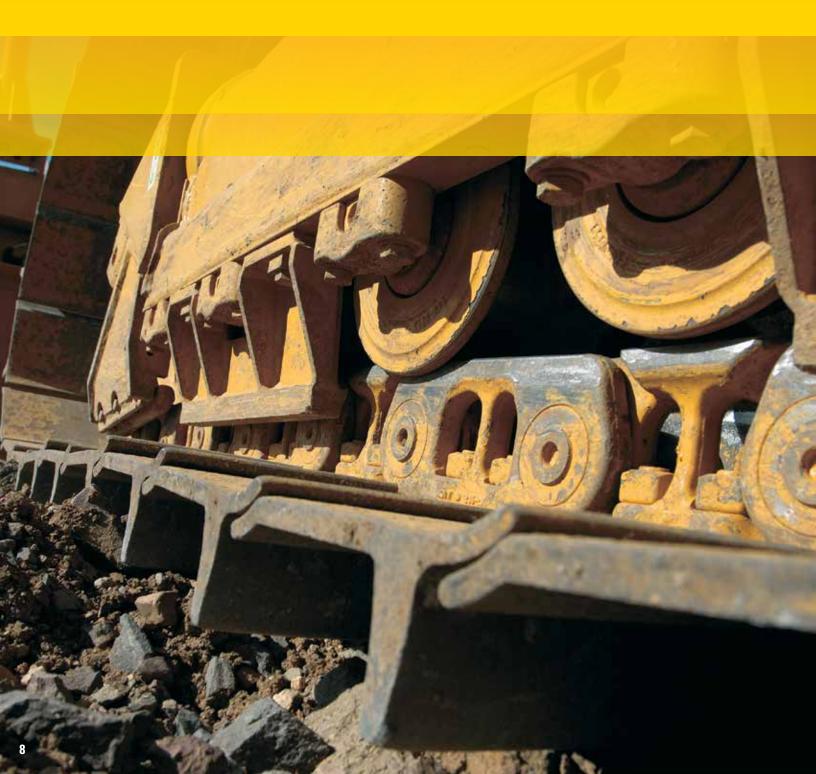
Cat Track Options	Track Loader Compatibility		Track-Type Tractor Compatibility			
	953	963	973	D6	D7	D8
SystemOne™	•	•		•		
Heavy Duty	•	•	•			
Heavy Duty Extended Life with DuraLink™				•	•	•
General Duty	•	•	•	•	•	•
Tri/Quad				•		

## CAT SystemOne UNDERCARRIAGE

#### **THE LEADER IN LOWERING 0&0 COSTS**

The goal behind Cat SystemOne Undercarriage: Develop a durable and reliable undercarriage that works and wears as a system, ensuring a balanced wear life to significantly lower your O&O costs. SystemOne is designed to increase undercarriage uptime and productivity, acheive longer service life, and reduce maintenance intervals and repair costs.

SystemOne delivers on its goal by routinely cutting your 0&0 costs. But performance success hasn't stopped us from constantly improving SystemOne—to help keep improving your productivity and profitability.



#### **CONTINUOUS IMPROVEMENT**

Caterpillar engineers have made many design enhancements to develop the superior SystemOne iron we're using today, particularly in the link assemblies. Overall, we have improved our design, manufacturing processes, and materials used for application recommendations.

Take a look at these examples of major SystemOne design and manufacturing improvements. Caterpillar is committed to continuous improvement so you can be assured we'll never stop making SystemOne better for you.

#### **Dry Joint Protection**

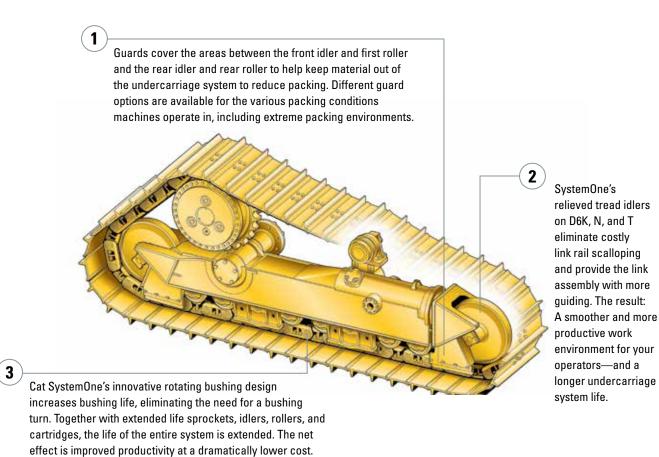
- Increased bushing strength to resist bushing cracking
- Redesigned the seal cavity, which allows seals to stay in their correct position and defends against the seal rolling under and packing
- Incorporated harder cartridge inserts to minimize endplay generation and thrust ring damage, which keeps oil where it belongs

#### **Seal Exposure Reduction**

- Cambered pivot shafts on LGP machines reduce thrust bias wear and provide better track alignment and less seal exposure throughout the life of the system
- Added a Relieved Tread Idler (RTI) to better resist thrust wear and reduce material packing in the track seal cavity

#### **Idler and Sprocket Life**

• As in the original design, idler and sprocket segments are manufactured for reuse, so they typically last for up to two track systems (varying by model, application, and underfoot conditions)



9

### HEAVY DUTY EXTENDED LIFE UNDERCARRIAGE WITH DURALINK (HDXL)

#### **DURABILITY FOR TOUGH JOBS: ACHIEVE 20-40% LONGER LIFE**

Designed for maximum durability, our HDXL systems with Cat DuraLink are engineered to match the requirements of machines operating in demanding work environments.

Extend your undercarriage life in aggressive, high-impact applications such as:

- Logging/reforestation
- Side-sloping work
- Rocky conditions and uneven terrain

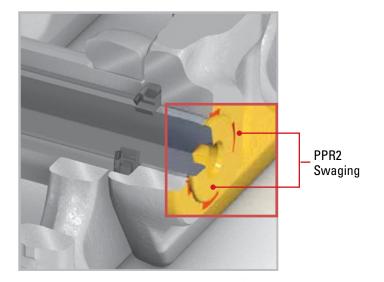
Cat Heavy Duty track plus Positive Pin Retention 2 (PPR2) combine to extend machine life. The link assembly mechanically locks the link to the pin to resist pin walking and link cracking for reliable sealing and track life.

Enhancements include:

- Upgraded link eliminates cracking and spalling
- Larger bolt improves shoe retention
- Increased pin and bushing retention extends wear life
- Better pin retention, longer seal life

#### **POSITIVE PIN RETENTION 2 (PPR2)**

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



AVAILABLE ON D6R/T, D7



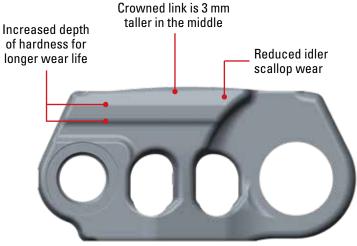
AVAILABLE ON D8N/R/T

This patented system combines larger diameter bushing, track roller, and sprocket segments to create a link assembly with more wear material, improved life, and innovative enhancements.

Enhancements include:

- New crowned link prevents link scalloping
- Improved sealing system eliminates dry joint issues
- Increased bushing and link wear material extends wear life
- Redesigned nut seat window eliminates cracking
- Scallop design wear surface eliminates vibration

# PATENTED CATERPILLAR DESIGN Increased depth of hardness for longer wear life



## **CAT HEAVY DUTY TRACK**

#### **TOUGH TRACK FOR TOUGH JOBS**

Specifically engineered to match the requirements of medium-size machines with an elevated sprocket operating in demanding work environments, Cat Heavy Duty track is much more than just another version of conventional Cat SALT.

In most tough underfoot conditions, Heavy Duty track can extend your undercarriage system life up to 20 percent more than Cat General Duty, with the greatest benefits realized in aggressive, high-impact applications such as:

- Logging/reforestation
- Side-sloping work
- Rocky conditions
- Any uneven terrain with wide track shoes (specifically Low Ground Pressure (LGP) machines)

#### Joany Duty Track Compared to Coperal Duty Track

пеаvy	Duly	паск	Compared	to dei	ierai Di	цу ггаск

Component	Benefit			
Links	<ul> <li>Greater bushing retention</li> <li>Deeper heat-treat</li> <li>Increased strength</li> </ul>			
Bushing	<ul> <li>Increased retention</li> </ul>			
Pin	<ul> <li>Increased retention</li> </ul>			

Results may vary based upon application.

AVAILABLE ON D8N/R/T

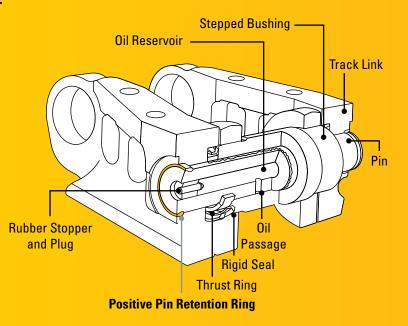
## **POSITIVE PIN RETENTION** (PPR) TRACK

#### **DESIGNED FOR MAXIMUM TRACK LIFE**

PPR track features specially machined links and pins that allow for the use of a metal retaining ring. This ring is pressed into the groove between the pin and link, locking the joint to a predetermined factory end-play specification.

- Prevents end-play generation (the outward movement of the links on the pin)
- Ensures oil retention in high-impact conditions

This exclusive Caterpillar design is recommended for applications that generate high impact loading such as mining, heavy construction, demolition, and waste disposal. Machines equipped with wider shoes, Extreme Service shoes, or Super Extreme Service shoes should also consider PPR track.



## **CAT GENERAL DUTY TRACK**

#### **PERFORMANCE YOU CAN COUNT ON**

We recommend General Duty Undercarriage for your low-to-moderate impact applications where the elevated performance of the Cat Heavy Duty Undercarriage is not needed.

- While General Duty is built to different specifications than Heavy Duty, its design makes General Duty and Heavy Duty components interchangeable, eliminating any need for retrofitting and keeping downtime to a minimum. Cat Heavy Duty 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 track groups are stocked.
- 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 moderate service shoes for track-type tractors will be available in preassembled track groups.)
- General Duty is covered by Cat Undercarriage Assurance. Ask your Cat dealer for details.

AVAILABLE ON D6M/N, D6H/R,T

## CAT TRI-LINK & QUAD-LINK TRACK

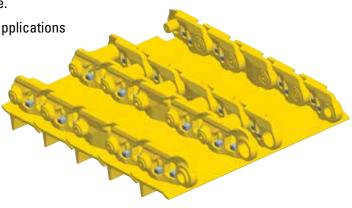
#### **DESIGNED FOR THE EXTREME**

Tri-Link track and Quad-Link track were developed by Caterpillar as undercarriage solution options for the most severe impact conditions. Their unique designs improve link assembly strength by bolting on additional outrigger chains, making them the right choice for logging (skidding), stumping, and taking on work in rocky terrains or any application where shoe deflection is high.

Tri-Link track adds one outrigger chain to the outer ends of the track shoes, and Quad-Link track adds two, which greatly improves sealability and structural performance.

Using Tri-Link track or Quad-Link track in high-impact applications may at first seem more expensive, but tough tracks typically result in lower undercarriage cost-per-hour because they were designed for extreme conditions and offer you better load distribution, improved lubricated joint life (fewer dry joints), and greater system reliability.

NOTE: Tri-Link track and Quad-Link track are available only with the Heavy Duty track option.



## **COMPREHENSIVE SUPPORT**

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



#### **UNDERCARRIAGE AND WEAR LIFE ASSURANCE PROGRAMS**

Our Undercarriage Assurance Programs demonstrate our commitment to provide you the lowest cost-per-hour undercarriage systems. Assurance Programs offer 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.

	Coverage in Years	Coverage in Hours	Coverage in Percent Worn
General Duty	4	3,000	100%
HDXL	4	5,000	100%
SystemOne	4	6,000	100%

Stipulations Apply

#### **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, using 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 to help you decide on the undercarriage that best suits your machine, application, and owning and operating needs.

PEDJ0100-05 www.cat.com

