CAT® MINING UNDERCARRIAGE
ALL THE RIGHT CHOICES

LARGE TRACK-TYPE TRACTORS, HYDRAULIC MINING SHOVELS, ELECTRIC ROPE SHOVELS, AND ROTARY DRILLS
LOWER COST. LONGER LIFE.

Your ideas and experience on the job fuel our commitment to develop solutions to meet your needs. With 110 years of undercarriage innovation, we’re dedicated to giving you the best products — and we never stop working to make them better.

Every Cat® Undercarriage is designed by Caterpillar engineers and built to exacting specifications based on businesses like yours. On-machine load analysis drives product development, with a goal to lower your costs. The result is engineered solutions that precisely match your machine and application.

Caterpillar designs and manufactures all mining undercarriage products.

Genuine Cat branded undercarriage is never manufactured by a competitor.
HYDRAULIC MINING SHOVELS
Experience increased uptime and low operating costs with Cat undercarriage designed and built specifically to withstand the rigors of any digging environment.
- Heavier track chain handles high field loads
- Larger diameter track pins increase strength
- Reduced pitch extension wear increases track chain life by 20% to 40%

CAT MINING UNDERCARRIAGE
All Cat Undercarriage components are integrated with the machine and designed to work as a system. Caterpillar product support, warranty, undercarriage assurance programs, and worldwide parts distribution network ensure responsive service and long life.

TRACK-TYPE TRACTORS
Caterpillar continues to innovate and improve undercarriage performance.
- High-quality materials and carefully controlled manufacturing processes for reliable, durable components that wear at a balanced rate
- Longer life and predictable, manageable wear mean you get maximum undercarriage performance at the lowest possible operating cost

HYDRAULIC MINING SHOVELS
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ELECTRIC ROPE SHOVELS
Keep productivity up with undercarriage designed and built specifically for your challenging conditions.
- Larger diameter idler reduces contact stress with the track link
- Larger track roller shaft increases roller durability and life
- Larger track roller tread reduces contact stress with track

ROTARY DRILLS
Your rotary drill just got a new lease on life. Cat Grease Lubricated Track (GLT) Undercarriage is built for the rigorous conditions in mining applications.
- Larger undercarriage components, stronger assemblies, and 25% increase in internal wear
- All components are designed for extreme conditions and to increase undercarriage life.
Cat Undercarriage works and wears as a system, ensuring a balanced wear life to significantly lower your O&O costs with increased uptime, productivity, and service life. It also reduces maintenance intervals and repair costs.

CAT TRACK OPTIONS

- **Heavy Duty Extended Life (HDXL) with DuraLink™**
  Specifically designed to reduce scalloping in high abrasion conditions. Users can expect a link wear life increase of up to 30%, along with a bushing wear life increase of up to 40%. This technology is part of a complete package of components aimed at increasing the entire Undercarriage life. This offering provides the longest life and lowest operating costs in the industry.
  – Other Features: SRL steel with profiled link, new bushing end coatings that increases seal life up to 8,000 hours, single tooth master link

- **Heavy Duty (Scallop Resistant Link)**
  Specifically designed for applications with greater than 5,000 hours wear life. End coated bushings provide longer seal life, coated track pins provide exceptional performance – the only coated components in the industry. This offering provides industry leading performance.
  – Other Features: SRL links, guaranteed wet bushing turns, increased link weight to resist cracking in even the toughest conditions, single tooth master link

- **General Duty**
  Specifically designed for applications with less than 5,000 hours wear life. This offering has no end coated bushing and includes standard track pins. Bushings can be turned.
  – Other Features: General Duty wear life vs. Standard is at minimum 80% in same application, five tooth master link, industry standard performance and price
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, extreme service shoes offer optimal performance and wear life. (General Duty extreme service shoes for track-type tractors will be available in preassembled track groups.)

- D9, D10, and D11 General Duty comes with PPR, which prevents end-play generation (the outward movement of the links on the pin) and ensures oil retention in high-impact conditions.

- General Duty is covered by Cat Undercarriage Assurance. Ask your Cat dealer for details.
CAT HEAVY DUTY TRACK

TOUGH TRACK FOR TOUGH JOBS

Specifically engineered to atch the requirements of medium-size machines with an elevated sprocket operatingin demanding work environments. Cat Heavy Duty Track is much more than just another version of conventional Cat SEaled and Lubricited Track (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]

### Heavy Duty Track Compared to General Duty Track

<table>
<thead>
<tr>
<th>Component</th>
<th>Benefit</th>
</tr>
</thead>
</table>
| Links     | • Greater bushing retention  
            • Deeper heat-treat  
            • Increased strength |
| Bushing   | • Increased retention |
| Pin       | • Increased retention |
HEAVY DUTY EXTENDED LIFE UNDERCARRIAGE WITH DURALINK™

INNOVATION DRIVES 20 TO 40% LONGER LIFE

Designed for maximum durability, this patented system consists of Cat DuraLink and larger diameter bushing, track roller, and sprocket segments. This combination creates a link assembly with more wear material and improved life. It will tackle the most rigorous terrain without breaking.

Enhancements include:

• Scallop design wear surface to eliminate vibration and help run undercarriage to its fullest
• Increased link wear material for extended wear life
• Added material and redesigned at the nut seat window to eliminate cracking

*Link height varies by model*
SLEEVE BEARING TRACK UNDERCARRIAGE

A CAT EXCLUSIVE OFFERING TO MAXIMIZE LIFE AND MINIMIZE DOWNTIME

With more than ten years of proven performance in the field, the patented Cat Sleeve Bearing Track design has demonstrated its ability to eliminate galling, increasing track life.

- Standard on all D11N/R/T undercarriage: General Duty, Heavy Duty, HDXL
- Designed to operate at higher speeds and greater loads
- Eliminates galling between pin and bushing
- Increases track reseal point to 8,000 hours on HDXL and 6,000 hours on Heavy Duty

Because it extends undercarriage life, the need for service before normal bushing turn time is also reduced—reducing maintenance costs and unscheduled downtime. Like all Cat undercarriage, it’s built to last. Longer life and predictable wear mean you get maximum performance at the lowest possible operating cost.
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.
HYDRAULIC MINING SHOVEL, ELECTRIC ROPE SHOVEL, AND ROTARY DRILL UNDERCARRIAGE

NEW OFFERINGS ARE AVAILABLE TO REPLACE EXISTING UNDERCARRIAGE ON OLDER MACHINES WITH GENUINE CAT UNDERCARRIAGE

**Cat Track Options**

<table>
<thead>
<tr>
<th>Cat Track Options</th>
<th>MD6290/ SKR</th>
<th>MD6240/ SKFX</th>
<th>MD6420A/ SKS</th>
<th>MD6540/ SKL</th>
<th>MD6640/ 49HR</th>
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</thead>
<tbody>
<tr>
<td>GLT (Greased Lubricated Track)</td>
<td>•</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>GLT with PPR2 (Positive Pin Retention 2)</td>
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</tbody>
</table>

**Rotary Drill Capability**

**Track Drill Capability**

<table>
<thead>
<tr>
<th>MD5075/ R30C</th>
<th>MD5090/ 345-345S</th>
<th>MD5125SCH 5000C/CL</th>
<th>MD5150/ R60</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLT (Greased Lubricated Track)</td>
<td>•</td>
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**Hydraulic Mining Shovel Capability**

<table>
<thead>
<tr>
<th>6015</th>
<th>6020</th>
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<tbody>
<tr>
<td>GLT with PPR2 (Positive Pin Retention 2)</td>
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</tbody>
</table>

**Hydraulic Mining Shovel Capability**

<table>
<thead>
<tr>
<th>6030</th>
<th>6040</th>
<th>6050</th>
<th>6060</th>
<th>6090</th>
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<tbody>
<tr>
<td>Cat Undercarriage</td>
<td>•</td>
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<td>•</td>
<td></td>
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<tr>
<td>Cat Heavy Duty Undercarriage</td>
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</tbody>
</table>

**Electric Rope Shovel Capability**

<table>
<thead>
<tr>
<th>7495HR</th>
<th>7495HD</th>
<th>7495HF</th>
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</thead>
<tbody>
<tr>
<td>Cat Undercarriage</td>
<td>•</td>
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</tr>
</tbody>
</table>

* Available in 2019
YOUR ON-THE-JOB PARTNER

Your Cat dealer is the best ally in the business. Whatever you need, from products and service to advice on an application or DIY maintenance, a team of experts is right there for the asking. On-site or online, that connection will never fail you.

Our parts and service representatives:

• Have the best training and tools to manage your undercarriage system
• Regularly inspect and measure wear on your undercarriage
• Prepare reports with maintenance and repair alternatives so you can make informed decisions to reach the lowest possible cost-per-hour or per mile/km of operation

MINING OUR FUTURE

We are serious about your business and about your Cat equipment. Based on your input, we are working on a multi-generational mining product development plan, dedicated to creating mine-site solutions. With significant testing and design improvements, we will bring products to market faster. And we will continue to enhance the existing undercarriage on all of our models as we use our experience to develop new innovations. Our goal is to offer you the lowest owning and operating costs with the strongest and most reliable power in the industry.
POSITIVE PIN RETENTION 2 (PPR2) TRACK

EXCLUSIVE DESIGN EXTENDS TRACK LIFE AND COMPONENT REUSE

PPR2 was designed for high-impact and high-travel applications such as mining, heavy construction, pipe laying, demolition, and scrap handling. It mechanically locks the link to the pin to resist pin walking and link cracking for reliable sealing and maximum track life to minimize your owning and operating costs.

- 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 redesigned, stronger track links

*Standard on MD6420A, 6015, 6020B, 374D, and 390D.*

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 GREASE LUBRICATED TRACK

IMPROVE UNDERCARRIAGE LIFE ON YOUR EXCAVATORS

Each track joint is sealed to retain the grease added between the pin and bushing, minimizing internal wear by at least 25% over sealed track. Grease Lubricated Track link assemblies are direct replacements for sealed link assemblies on Cat hydraulic excavator models.

- Increases external wear life by at least 20% with larger bushing
- Decreases track noise by eliminating metal-to-metal contact between pin and bushing
- Improves sprocket wear life with sprocket and link assembly pitch remaining matched for a longer period of operation
- Allows for enhanced undercarriage management opportunities

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, resulting in a significant increase of internal wear life of the link assembly.

*Models 307-330 use the Poly-W track seal as shown. Models 345-385 use a rigid track seal.
HYDRAULIC MINING SHOVEL (HMS)

6015 AND 6020 TRACK GROUP/LINK ASSEMBLY
Designed with industry leading technology
• Greased Lubricated Track (GLT) with exclusive Cat rigid seals
• Positive Pin Retention – PPR for the 6015B and PPR2 for the 6015/6020B
• Extra material in links with spalling resistant design
• Stepped bushings

TRACK ROLLERS
Designed with industry leading technology
• Sealed-for-life track rollers
• Heavy duty components

IDLER GROUP
Designed with industry leading technology
• Hydraulic tension control
• Cat duo-cone seals
• Sealed-for-life idler

SPROCKETS
• Life matched to rest of undercarriage system
• Alloy steel casting with selective heat treat to maximize life

6030, 6040, 6050, 6060, AND 6090 TRACK PADS
Designed for long wear life and maximum protection against breakage.
• Cast pads from high quality steel: alloy steel, case-hardened bushings
• Induction hardened roller paths and drive lugs for long wear life and tough interior
• High interference, straight bushings for longer joint life (6030, 6050, and 6060; 6040 1Q 2019)
• Cat service tooling; can be easily re-pinned and re-bushed
• Proprietary heat treat and quench system

PINS
• Spring clip pin retention keeps pins from walking
• Larger pin bosses and improved pin retention to maximize life
• Improved pin retention
• Can be re-bushed

SPROCKETS
• Life matched to rest of undercarriage system
• Alloy steel casting with selective heat treat to maximize life

ROLLERS/IDLERS
• Caterpillar proprietary fixed axle technology to limit overheating
• Sealed-for-life with Cat seal system and oil lubrication to eliminate grease consumption and improved life and performance
• One-piece forged roller rim to improve structural integrity
• Simple bolt-on assembly
ROTARY DRILLS

DESIGNED TO INCREASE UNDERCARRIAGE AND COMPONENT LIFE.

- Heavier track chain increases durability for handling high field loads
- GLT reduces pitch extension wear for 20-40% increased chain life
- Larger diameter idler and larger track roller tread reduce contact stress with track link
- Double flange rollers improve primary track guiding
- Stronger, welded roller guard assembly improves secondary track guiding
ELECTRIC ROPE SHOVEL (ERS)

TRACK PADS
Designed for long wear life and maximum protection against breakage.
- Through hardened; optimum ductility and yield strength
- No tempered transition zone as with induction hardened pads

PINS
- Alloy pins eliminate stress risers
- Simple, easy-to-service pin retention method
- Through hardened, alloy steel – no stress riser at shoulder

SPROCKETS/TUMBLERS
- Highly tolerant of pitch extension
- Raised to provide optimum clearance of ground objects
- Self-seeking pitch line allows spreading load over several teeth
- Designed to last life of track pads with minimal maintenance
- Alloy steel casting with heat treat to maximize life

IDLERS
- Greased lubrication eliminates catastrophic failures associated with seal failure and oil leakage
- Simple track tension adjustment system
DEALER UNDERCARRIAGE ASSURANCE PROGRAMS

To help you get the most from your Cat Undercarriage, your Cat dealer will make sure you have global service and support for all undercarriage configuration options, from advanced diagnostics to worldwide parts delivery.

UNDERCARRIAGE ASSURANCE PROGRAMS

Our Undercarriage Assurance Programs provide you the lowest cost-per-hour undercarriage systems with 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. Your Cat dealer has full details about coverage for specific undercarriage configuration options, for example:

• **Undercarriage Assurance Gold** is a leakage and breakage program for D11 Sleeve Bearing Track. This coverage only applies after all other applicable coverages have expired. Gold coverage is 4 years or 6,000 hours, whichever occurs first.

• **Undercarriage Assurance Genuine** is a leakage and breakage program for all other large track-type tractor machines. This coverage only applies after all other applicable coverages have expired. Genuine coverage is 4 years or 4,000 hours, whichever occurs first.

• **Electric Rope Shovel Cast Crawler Shoe Assurance Program**
  Caterpillar offers a wear and breakage program developed specifically for the 125-inch cast crawler shoe in oil sands application. The coverage begins at the same time as the standard machine warranty or new parts warranty term and terminates in 4 years or 24,000 hours, whichever occurs first.

• **Electric Rope Shovel Cast Crawler Shoe Assurance Program**
  Caterpillar offers a wear and breakage program developed specifically for the:
  – 79 inch cast crawler shoe used on the 7495 HR
  – 84 inch cast crawler shoe used on the 7495 HD
  The coverage begins at the same time as the standard machine warranty or new parts warranty term and terminates in 4 years or 16,000 hours, whichever occurs first.

• **Hydraulic Mining Shovel Cast Crawler Shoe Assurance Program**
  Caterpillar offers a wear and breakage program developed specifically for the HD cast crawler shoes used on 6030-6060. The coverage begins at the same time as the standard machine warranty or new parts warranty term and terminates in 3 years or 15,000 hours, whichever occurs first.
CUSTOM TRACK SERVICE (CTS)

MAKE IT LAST. KEEP COSTS LOW. FIX IT RIGHT.

An improperly managed undercarriage can account for more than half of machine maintenance costs. CTS is a comprehensive program for managing your undercarriage system. We use 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 maintenance, and schedule downtime. CTS analysis can be completed on your job site and helps you make informed decisions that keep your operating costs as low as possible.

Your Cat dealer can help you take advantage of this valuable service.

WORLDWIDE PARTS AVAILABILITY

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

Call your dealer for details on all our service and support programs.
INSIST ON CAT UNDERCARRIAGE

Get the lowest owning and operating costs and maximize equipment uptime. We design and produce our own undercarriage to more precisely match your machine and application and your dealer has the knowledge and selection tools to help you choose the best option for your operation. Rugged, oversized components and excellent serviceability, plus unmatched support from the global Cat dealer network. We’re built to keep you moving.

To learn more, call your local Cat dealer.