Undercarriage Systems and Support
Maximize Productivity for Lower Costs

Undercarriage maintenance can represent a large part of your total owning and operating expense. To keep costs down, you need to select the right system for your application, manage system wear, and plan maintenance to avoid unscheduled downtime.

We help you every step of the way. The result is higher productivity, greater availability, and lower cost per hour. That’s what Cat® undercarriage systems and our support are all about.
Caterpillar® undercarriage components work as a powerful system to propel your machine over all types of terrain. Since introducing its first track-type tractor in 1925, Caterpillar has continued to innovate and improve undercarriage performance. High-quality materials and carefully controlled manufacturing processes ensure that Cat undercarriage components are reliable, durable, and wear at a balanced rate. Longer life and predictable, manageable wear mean you get maximum undercarriage performance at the lowest possible operating cost.
1 | Links
Hardened for long life and excellent sealability
Special heat treat processes give Cat links consistent surface hardness, superior hardened depth, and strong core hardness. This results in excellent wear resistance, strength, and durability for unmatched sealability and long life.

2 | Rollers
Manufactured for increased life and low costs
Cat rollers are through hardened for long wear life, unmatched structural support, and resistance to deformation. Cat Duo-Cone™ seals help ensure lifetime lubrication to extend life, permit roller reshelling, and lower your costs.

3 | Segments
Hardened for improved wear resistance
High surface hardness and excellent hardened depth and core hardness mean Cat segments provide long wear life, resistance to bending and breakage, and maximum hardware retention. The bolt-on design reduces replacement time.

4 | Pins and bushings
Matched to links for strength and sealability
Cat pins and bushings are dimensionally matched to the links and manufactured to provide excellent track joint integrity. This design helps ensure maximum sealability. High surface and core hardness translate into increased strength and wear resistance.

5 | Seals
Designed for long life and low costs
To keep abrasives out and oil in, the Caterpillar rigid seal design combines high wear resistance and load protection. The result is a “wet” joint at turn time, which extends bushing life and lowers your costs.

6 | Idlers
Manufactured for more wear resistance and less downtime
Whether cast, forged, or fabricated, Cat idlers provide superior structural support and rebuild capabilities. Special heat treat processes help ensure proper hardness levels, providing wear resistance. Cat Duo-Cone seals help ensure lifetime lubrication, eliminating idler maintenance and lowering operating costs.

7 | Track shoes
Hardened and tempered for better wear resistance
Caterpillar track shoes are furnace hardened and tempered for strength and resistance to bending and breakage. We offer a variety of track shoe options to meet the requirements of your work environment.
Expert System Management—To Make Your System Last

Cat undercarriage systems are built to wear longer and cost less to operate. Our Custom Track Service (CTS) program will help you reach these goals. Using diagnostic equipment, we monitor performance and predict wear rates. With this data, we can help you plan maintenance and evaluate your most economical repair options. Armed with this information, you can schedule service rather than deal with costly unscheduled downtime.

Custom Track Service

Enhances built-in value
Caterpillar builds value and durability into every undercarriage system, balancing critical factors like raw materials, heat treat processes, and the amount of wear material. Because Caterpillar has control over these processes, Cat undercarriage components wear at a predictable rate and can be managed as a system. We’ll help you take full advantage of this built-in value with expert system management and planning assistance.

Provides fast, accurate analysis
To make good undercarriage maintenance and repair decisions, you need accurate information in a timely manner. Using the Ultrasonic Wear Indicator, we can determine the condition of your undercarriage system in just a few minutes, so you can get your machines back to work quickly.
We electronically download data from the Ultrasonic Wear Indicator into our computers, ensuring quick, accurate transfer of information. Then, using our computerized CTS program, we analyze the results and prepare cost-per-hour projections for a variety of service options.

**Allows informed decisions**

We use these CTS reports to make service recommendations. Together, we can decide on the course of action that best meets your equipment planning needs. By scheduling maintenance and avoiding unscheduled downtime, you can run your equipment more productively a greater percentage of the time.

**Saves time and money**

Custom Track Service helps you manage your undercarriage system and lower your costs by:

- enhancing the built-in value of your undercarriage components.
- reducing undercarriage inspection time.
- providing quick, accurate analysis of undercarriage wear information.
- allowing you to make informed decisions about maintenance.
- scheduling service to meet your equipment planning needs.

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**Make your track last**

- Use the narrowest shoe possible.
- Minimize high operating speeds in nonproductive situations.
- Alternate turning direction.
- Adjust the track for correct tension in the working environment.
- Make daily visual inspections of the equipment.
- Keep the undercarriage clean of mud and debris.
Fast, Dependable Service—To Fix Your System Right

No matter how well-built or managed, your undercarriage system will eventually need service. When it does, we have the repair options, trained professionals, and proper tooling—backed by the industry’s best parts availability—to get your machines up and running quickly and reliably.
Maximizes system life

A “wet” bushing turn restores your sealed and lubricated track system to like-new condition—internally. This process involves:

- disassembling the track.
- cleaning and inspecting each joint.
- turning the bushings 180°.
- resealing, relubricating, and reassembling the track.

A “wet” bushing turn prevents internal wear and maximizes bushing life. If you continue to operate in the same working environment, wear life on the second bushing side will equal that of the first side. This enables you to maximize the life of other undercarriage components, greatly reducing your cost per hour.

We have the correct service tooling and trained service personnel to perform a “wet” bushing turn. We’ll get your equipment up and running quickly and reliably.

Roller reshelling

Restores full wear life

Cat rollers are built to be rebuilt. High bore hardness and excellent sealability mean internal components like shafts and bearings can be reused. Only the shell is replaced, dramatically reducing costs.

In this procedure, we disassemble the roller, check the components, and place all reusable components into a new shell. The result is a like-new roller—full wear life is restored at a fraction of the cost of complete replacement.
Roller swapping

Lengthens system life
Different working conditions or operating procedures can cause rollers to wear unevenly. Roller swapping involves moving the rollers to different positions on the same side of tractor or moving them from one side to the other. This simple procedure can help you get the most out of your rollers, extending roller life and reducing downtime and repair costs.

Idler resurfacing

Extends wear life
Like rollers, Cat idlers are built to be rebuilt. Their excellent sealability means we can reuse internal components, lowering your overall repair costs.
In the resurfacing process, we disassemble the idler and check internal components. Then, using a special process developed by Caterpillar, we apply new wear material to the idler tread, extending wear life and reducing your maintenance expenses.

Track shoe regrousering

Increases shoe life
Because track-type machines work in many different conditions, track shoes are a major wear item. In some cases, they may need to be replaced when they reach their service limit. If the shoe pad is structurally sound, however, new material may be added to the grouser surface. This process extends shoe life at a cost much lower than replacement.
On-site track service

Our field service trucks are equipped with the necessary equipment for track repair. This equipment saves time by permitting easy removal, repair, and replacement of track in the field.

Commitment of service and support

We’re committed to helping you maximize your productivity and lower your costs. We’re committed to your success.

Together, we can use the Customer Support Agreement process to achieve these results.