McLAREN
Manufacturer of Tracks and Tires

Reasons Why Rubber Tracks De-Track



If you own a tracked machine, you may be all too familiar with de-tracking. If you've been lucky enough to avoid this experience so far, de-tracking refers to when the rubber tracks on a tracked machine come off partially or completely during operation. This occurrence can result in significant downtime, machine damage, damaged rubber tracks, and lost profits. It could have several distinct causes, which may confuse some people. But by understanding what makes a track de-track, you can better prevent the inconvenience from happening. Read on to learn about some of the most common reasons why rubber tracks de-track.

Incorrect Track Tension

Improperly tensioned tracks are a frequent cause of de-tracking. If track tension is too loose, the track will not stay in the right position and will be more likely to come off. Even if you install your tracks properly, they may begin to lose tension over time. When in use, rubber tracks may stretch slightly throughout their lifespan. As such, it is important to check the tension of your rubber tracks regularly. If you use your tracked machine a lot, check the tension of your rubber tracks at least every few days to prevent de-tracking.

To check the tension, move the machine's boom to the side and push it onto the ground so that you can lift the tracks off the floor. Once you lift them, measure the distance between the middle roller and the track to ensure that it complies with manufacturer specifications. If the distance is too great, make sure to tighten the tracks to the correct tension. Doing this regularly can help you avoid bigger issues.

Misaligned Track Frame

One of the reasons why a rubber track may come off is because the track frame is bent in some way. Ideally, the frame of a track should be completely straight. As a tracked machine sees use over time, however, the track frame can get twisted, bent, or otherwise damaged. If the frame becomes misaligned, the rubber track can easily de-track during operation. Keep an eye out for warped track frames.

Worn or Damaged Idlers, Rollers, and Sprockets

It is imperative to make sure that your machine's idlers, rollers, and sprockets are all in good, usable condition. An idler refers to the large, metal wheel located on the front of a track frame. This component is responsible for guiding the rubber track and tensioning it around the front of the undercarriage frame. When in reliable condition, an idler helps reduce the risk of de-tracking and keeps the track in proper alignment.

A roller, on the other hand, refers to a component on a tracked machine undercarriage that carries the weight of the machine as it moves. Lastly, a sprocket is a profiled wheel which has teeth or cogs that mesh with a perforated or indented track.

If you notice that these components are worn out or damaged, there will likely be a considerable amount of play—that is, space between the track and the undercarriage. This space will cause the track to come off more easily.

Improperly Mounted Idlers, Rollers, and Sprockets

Loose or improperly mounted idlers, rollers, and sprockets can also greatly increase your machine's potential for de-tracking. When mounting these parts, make sure to follow the manufacturer's recommendations. You should also ensure that you bolt them on properly. Even if just one roller is loose, the entire track could de-track. Avoid a headache by taking your time with mounting these critical parts.

Tracks Not Built or Installed According To OEM Specifications

Aside from a potential issue with the machine itself, the tracks that you use could also impact how often de-tracking occurs. For example, if the rubber tracks on your machine are not built according to the original equipment manufacturer's (OEM) specifications, then the tolerances of the tracks may not match the undercarriage. In this case, there is a higher chance for the track to de-track.

You should make sure to check the undercarriage components prior to installing a new set of rubber tracks. Doing so will allow you to determine if the tracks that you want to install are within the OEM specifications.

Keep in mind that as you run your machine, your undercarriage will begin to wear, causing your tolerances to become bigger. It is especially important to check the undercarriage components before installing tracks on machines that have experienced more than 600 hours of operation.

Poor Quality Forgings and Castings

Another common reason why rubber tracks de-track is because their guides are made from poor-quality forgings and castings. If these parts are inadequate, the guides will wear out more quickly. This premature wear will create a significant amount of play, which increases the potential of de-tracking.

Abnormal Operating Conditions

The above examples are all reasons why a rubber track may de-track under normal operating conditions. When operating your machine under abnormal conditions, however, the potential for de-tracking greatly increases, even if none of the above examples apply. For example, operating your machine on a very steep slope or heavy debris lodged in a track frame can cause serious issues. Overloading the machine can also present significant problems.

When buying a replacement track, you should buy from a quality supplier like McLaren Industries. While top-quality tracks designed specifically for your machine may require a larger up-front investment, they will reduce the potential for de-tracking, which can ultimately cost you a significant amount of money due to downtime and repairs. Purchase your tracks from a reputable company. At McLaren, we will help you find a quality set of tracks that will match your machine according to OEM specifications and deliver optimum performance with minimal potential for de-tracking. Contact us today 800-836-0040 if you have any questions or request a quote.