McLAREN
Manufacturer of Tracks and Tires

What Is Link Ejection in Rubber Tracks?

Link ejection in rubber tracks refers to when the forging or pin that serves as the bond between the rubber and the metal in the track breaks or gets ripped out. When this occurs, the track can't be repaired. Instead, operators will have to purchase an entirely new rubber track for their machine. To prevent downtime and added equipment costs, it is important to take measures to prevent link ejection from occurring. Essentially, there are five main types of link ejection that can occur. To learn about the different causes of link ejection in rubber tracks, continue reading.

Poor Bonding Techniques

The majority of link ejections are the result of a defect in the rubber track manufacturing process. Namely, the metal and rubber bonding techniques have not been conducted properly, which can result in a broken or unsecured bond between the rubber and the metal in a track. In such a case, the bond between the rubber and metal is more likely to break, and a link ejection will likely occur.

Heat Buildup of Forgings

As they run, forgings get hot. If the materials used in the bonding process are not high quality, the heating of the metal and use of the metal track will eventually cause the bond to break down over time. To prevent heat buildup from causing link ejection in your rubber tracks, it's crucial to purchase tracks that are made with high-quality raw materials that will enable the bond to last the entire lifetime of the rubber track.

The Structure Is Not Volcanized Properly

Another type of link ejection in rubber tracks occurs when the track's structure is not vulcanized or manufactured properly. Because a bond will not form between metal and metal, there must be rubber in between the link and steel cables of a track. If the rubber layer between the track's forging and the cable is too thin, the steel cables inside the track may make contact with the link. Such contact will ultimately cause the link to eject due to the lack of rubber bonding.

Worn Rolling Area

A worn rolling area is one of the most common causes of link ejection in compact track loader rubber tracks. If the quality of the area that the bottom roller and idlers of the tracks roll upon is very poor, it will eventually wear down, break, and crack. When this area forms cracks, water, debris, and mud can seep in between the track's rubber and forgings and act like sandpaper.

Essentially, such debris will slowly sand away the bonding between the metal and rubber every time the track goes around the undercarriage of the machine. Over time, the degradation of the bond will lead to a premature link ejection. For this reason, it's very important to purchase compact track loader tracks that have a high-quality rolling area.

Improper Use

If the adjustment of the track is incorrect or if the track is used in an improper situation, the link can make contact with the undercarriage. In such a case, the link and the rubber connected to it could get ripped out of the track even if the rubber has bonded well to the forging. As such, the link isn't necessarily ejected but, rather, forcibly ripped off the track.

Because a rubber track becomes completely useless after a link ejection, it's crucial to work with a manufacturer with an exceptional reputation like McLaren. Due to our many years of experience producing OEM tracks, we have perfected rubber metal bonding technology and achieved an incredibly high level of consistency in our processes—unlike many other rubber track suppliers. To learn more about our industry-leading rubber tracks, contact us today at (800) 836-0040 or click here to request a quote.