



Rubber Track Manual & Warranty Guide

www.trackmantracks.com

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Introduction

Trackman®, a worldwide supplier of quality rubber products, is committed to providing new and improved products to meet the ever-changing needs of its customers. This dedication to innovation, technological leadership and continuous quality improvement has led Trackman to develop its line of Trackman® Rubber Track, a family of flexible, reinforced rubber tracks designed to serve as the primary tractive component for a wide variety of applications.

The Trackman line of rubber track combines advanced rubber compounding, tread design, and production technology to provide the user with an endless rubber track that will provide superior performance in the most demanding of applications. Trackman® Rubber Track is specifically designed to provide the durability, versatility and traction required to satisfy customer requirements in all types of services.

Purpose of this Manual

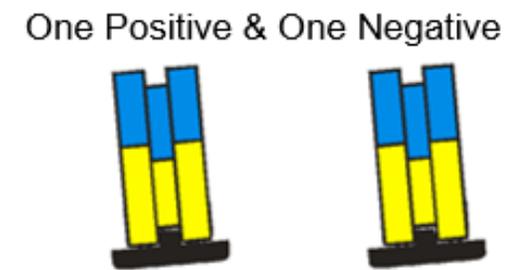
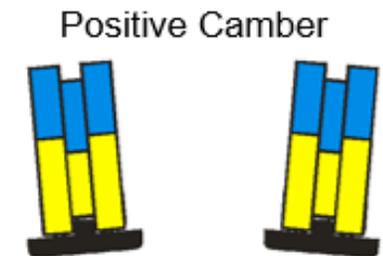
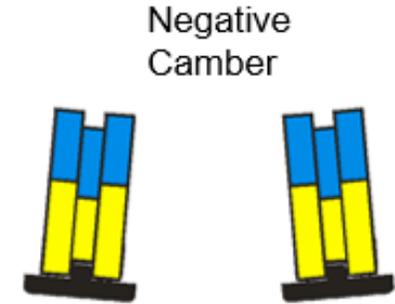
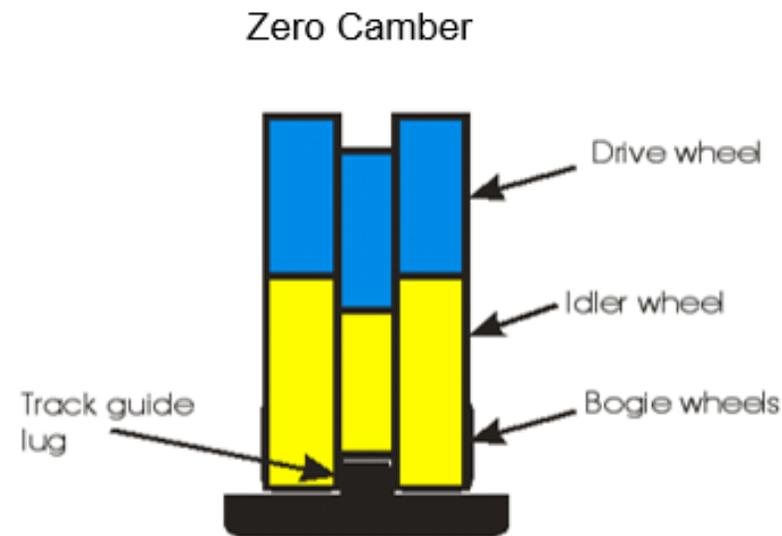
The purpose of this guide is to provide the user a better understanding of rubber track technology and how it relates to their equipment. This educational tool can be used with various equipment and applications and be a reference for years to come. The warranty manual section provides clear photographs of the various conditions and characteristics seen on rubber track, and how to assess these conditions. In addition to describing the appearance and probable cause of the condition observed, this manual will also provide actions to be taken for the track, the tractor, and the operation in which the track is used.

Glossery – Trackman Rubber Track Terminology

- **Alignment** - Term referring to the mutual parallelism of the elements of an undercarriage, especially the drive wheel, idlers, and bogies. Also, the mutual parallelism of paired undercarriages. Alignment is important because it affects the tracking of the track.
- **Bogie** - (Bogie Wheel) - A small, non-powered wheel which runs on the ground engaging length of the track, the purpose of which is to distribute the machine load over the track footprint. Typically, multiple bogie wheels comprise a bogie wheel system. Generally, the term “bogie wheel” is synonymous with the term “roller wheel”. However, in some contexts, the term “bogie wheel” indicates an independently suspended wheel, while “roller wheel” denotes a rigidly fixed wheel. An alternate term for bogie wheel is mid-roller or roller wheel.
- **Carcass** - The “belt” which forms the main body of a rubber track, and which contains the steel reinforcement package.
- **Chunking** - a vernacular term describing a condition of rubber in which macroscopic “chunks” of rubber are torn from the wear surface. Typically, as it relates to track, this condition is indicative of severe ground conditions, such as those containing scrap metal or flint.
- **Compaction** - The relative degree to which soil is compacted by the passage of vehicles across its surface. Primarily a function of machine ground pressure(s). In agriculture, high levels of compaction have been found to reduce germination rates and total crop yield.
- **Delamination** - A condition in which layers of rubber separate along the planes between cross-sectional laminae. Usually refers to separation within a carcass. May also refer to a tread lug condition (aka: onion peeling).
- **Drawbar** - Vernacular term for “Drawbar Pull,” the force which can be supplied at the drawbar of a draft vehicle. Typically quoted as a measure of tractive effort.
- **Drive Lug** - A rubber lug (usually, one of a series) located on the undercarriage-engaging surface of the track, the purpose of which is to drive the track by positively engaging the drive wheel.

Glossary – Trackman Rubber Track Terminology Cont...

- **Camber** - Term referring to the “roll” attitude of an undercarriage. Typically, camber is expressed as the angular departure from an “upright” or “flat” attitude, where the rotation occurs about a front to rear line running through the mounting location of the undercarriage. The purpose of providing camber is to ensure that the undercarriage runs “flat” to the ground surface when (elastically) deformed under the typical operating load of the machine.



Glossary - Trackman Rubber Track Terminology Cont...

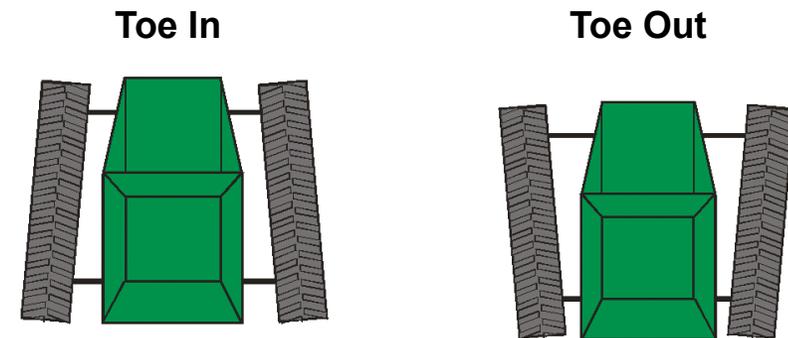
- **Drive Wheel** - The direct driving component of a rubber track undercarriage and/or system. Drive wheels may affect power transmission to the track by friction, by some form of positive mechanical engagement, or by a combination of the two.
- **Durability** - Refers to the ability of a rubber track or component to survive time in service. Typically, durability is a measure of the rate at which the track is consumed or destroyed by use.
- **Elongation** - A synonym for “strain.” Informally, refers to deformation causing an increase in length (usually, within the elastic limit). For example, most rubber track exhibits a 3 percent elongation at ultimate loading.
- **Flotation** - Refers to the relative ability of a machine to stay “on top of” soft ground conditions, rather than penetrating or sinking in. Generally, “high” or “good” floatation is a consequence of low ground pressure, and thus, of a large effective footprint.
- **Guide Lug** - A rubber lug (usually, one of a series) located on the undercarriage-engaging surface of the track, the purpose of which is to “guide” the track within set boundary limits, and thus, to prevent de-tracking.
- **Guide/Drive Lug** - A rubber lug (usually, one of a series) located on the undercarriage-engaging surface of the track, the purpose of which is both to “guide” the track within set boundary limits, and to drive the track by positively engaging the drive wheel.
- **Idler** - A non-driven wheel which defines a bend radius in a track system. Idler wheels define the “shape” of the track system.
- **Inboard** - A relative term denoting the “side” or “edge” of a member (e.g., a track or a wheel) closest to the centerline of the machine on which it is running.
- **Life Cycle** - The period of time from a product’s initial use to its date of retirement.
- **Misalignment** - A condition in which the various elements of an undercarriage (especially the drive wheel, idlers, and bogies) are not “in line,” or are not mutually parallel. Misalignment can result in poor tracking.
- **Mis-engagement** - A condition in which a track (especially a positive drive track) does not interact correctly with its drive wheel. Typically, a condition in which positive drive lugs fail to properly engage the recesses in a positive drive wheel.

Glossary - Trackman Rubber Track Terminology Cont...

- **OEM** - Original Equipment Manufacturer. In the context of this manual, the designer and/or manufacturer of rubber track undercarriages and/or machines.
- **Outboard** - A relative term denoting the “side” or “edge” of a member (e.g., a track or a wheel) furthest from the centerline of the machine on which it is running.
- **Outside Guide Lugs** - Guide lugs that are located at the “edges” of a track, rather than at its centerline. Used in pairs (“dual outside guide lugs”), these lugs encapsulate drive and idler wheels to prevent de-tracking.
- **Penetration** - The relative degree to which a tire or a track impresses itself into the ground under load. High gross vehicle weights, small footprints, and soft ground conditions all result in increased penetration. In general, track systems exhibit less penetration than tires.
- **Roller - (Roller Wheel)** - A small wheel designed to guide and distribute machine load to a track. Generally, the term “roller wheel” is synonymous with “bogie wheel.” However, in some contexts, the term “bogie wheel” indicates an independently suspended wheel, while “roller wheel” denotes a rigidly fixed wheel. An alternate term for roller wheel is mid-roller or bogie wheel.
- **Ridging** - A ground condition created by the tight turning of a vehicle, in which the soil is scraped into “ridges” by the sideward movement of the tires or track. Generally considered detrimental, ridging can be reduced through the use of tracks with beveled tread lugs. An alternate term for ridging is berming.
- **Skid Steer** - Refers to a method of turning a vehicle in which there is no articulation of the tires or track; instead, the tires or track on either side of the vehicle are driven at dissimilar speeds (or in dissimilar directions). The term “skid steer” is also sometimes used to denote skid-loader type pieces of equipment, such as the Bobcat or Case Unloader machines.
- **Spreading Force** - The total force applied to a track by the tensioning system of an undercarriage. In the case of two-pulley type systems, the “spreading force” corresponds to the force with which the front and rear idler/drive wheels are “spread” apart, against the track. In this type of system, the track tension is equal to one-half the spreading force.
- **Track Tension** - The total tensile load supported by a given span of track

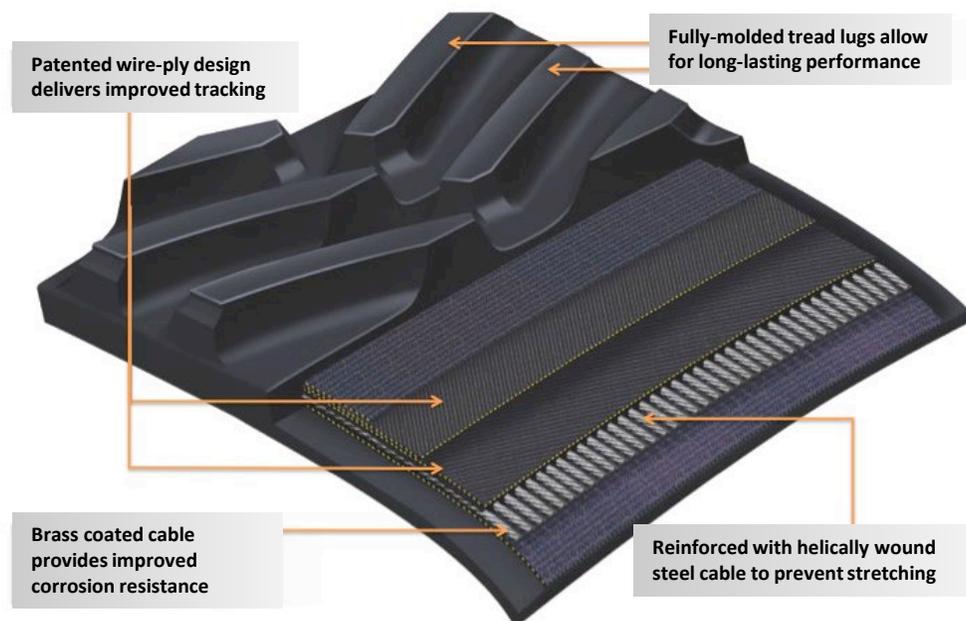
Glossary – Trackman Rubber Track Terminology Cont...

- **Tracking** - A term referring to a track's propensity to move laterally on its undercarriage. Typically, "good" or "proper" tracking is achieved when a track does *not* exhibit a propensity to move in either lateral direction. Conversely, "poor" tracking generally implies a condition in which the track *does* exhibit a propensity to move in a given lateral direction, and therefore "scrubs" its guide lugs against one side of the guide lug groove. Tracking is controlled through alignment, track tension and the internal construction of the track itself.
- **Tractive Effort** - Technically, the ratio of a vehicle's maximum drawbar pull to its total weight. Informally, this term is sometimes used to refer to the maximum drawbar pull alone. In either case, it is a measure of a vehicle's pulling ability.
- **Tread Lug** - A rubber lug (usually, one of a series) located on the ground-engaging surface of a track or tire, the purpose of which is to provide traction. An alternate term for tread lug is traction lug.
- **Undercarriage** - The supporting structure for a track operating on a vehicle. Typically, the undercarriage includes a frame, a drive wheel (and associated drive-line components), one or more idler wheels, and one or more bogie wheels.
- **Wheelbase** - The distance from the center of the foremost wheel in a track system (or on a vehicle) to the center of the rearmost wheel.
- **Tensile Strength** - The maximum load that can be supported by a member in tension, usually reported in PSI, and usually determined by the material yield point.
- **Toe - (Toe-in, Toe-out)** - Refers to deviations from parallelism between two members -- typically, between two paired undercarriages. Specially, toe is the difference in the transverse distance between the track planes, taken, respectively, at the extreme front and rear points of the track treads. When the distance at the rear is greater than the distance at the front, the tracks are said to be "toed-in," and in the reverse condition, are said to be "toed-out."



Trackman Rubber Track Construction

Trackman® Rubber Track is produced on custom-designed manufacturing equipment that combines the latest advancements in rubber processing technology with sophisticated computer process controls. This manufacturing process results in a product which is unsurpassed in quality, uniformity, and performance.



In general, flexible rubber track is composed of three major components: the carcass, the tread lugs, and the guide and/or drive lugs. The carcass is the foundation of the track, and is composed of several different rubber compounds, each of which is designed to perform a particular function (such as to promote adhesion, or to resist wear, cutting, chunking, etc.). This flat belt also contains the main steel reinforcement package that gives the track its strength, stiffness, and handling characteristics. The steel reinforcement package within the carcass usually includes several layers of steel belting - similar to that which would be employed in radial steel belted truck tires - as well as longitudinal steel cable. The purpose of the steel belting is to provide lateral stiffness, tear resistance, and proper tracking characteristics, as well as to protect the primary cable layer from impingement and damage. The purpose of the cable is to provide longitudinal tensile strength, so that the track cannot stretch (significantly) under load, or elongate over its lifetime. The cable employed is a heavy-gauge, high-tensile variety, which exhibits an ultimate elongation of less than 2.9 percent. Furthermore, it is treated to resist corrosion and to maximize its adhesion to the rubber substrate.

Trackman by Loc Rubber Track Construction

The tread lugs are molded to the ground-engaging side of the carcass. These lugs are designed to provide both exceptional traction and a smooth ride. The rubber compound used in these lugs is typically formulated for high wear resistance, as it is the tread surface of the track which will usually be subjected to the most wear and abrasion.

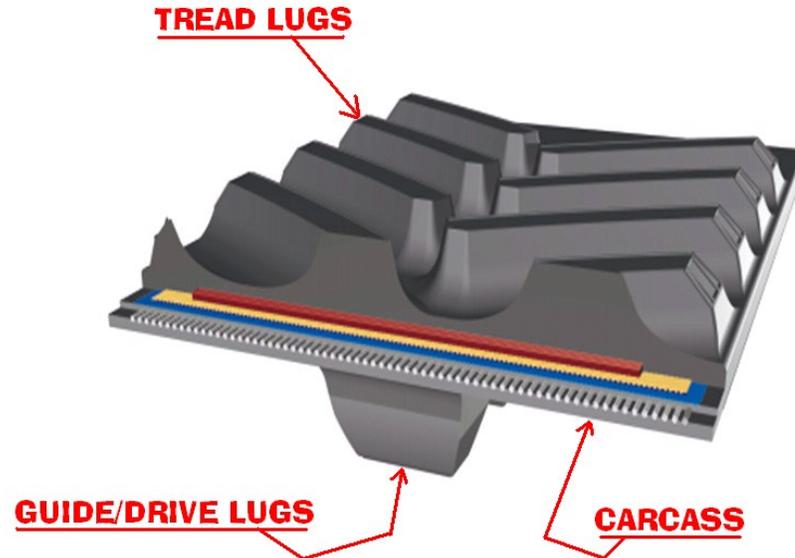
The guide and/or drive lugs are molded to the undercarriage-engaging side of the carcass. (That is, the opposite side from the tread lugs.) In friction-drive type track systems, where the track is driven solely by the friction between the drive wheel and the inside surface of the track, the purpose of these lugs is to retain the track (laterally) on the undercarriage, and to bear the applied side loads (such as when the machine is operating on a transverse incline). In positive-drive type track systems, where the track is driven via the mechanical engagement of the drive lugs by the drive wheel (much like a rack-and-pinion gear set), the purpose of these lugs is to retain the track on the undercarriage, to bear the applied side loads, and further, to offer a mechanical means for the transmission of the driving torque provided through the drive wheel. In virtually all cases, guide and/or drive lugs are formed from high modulus, abrasion resistant compounds.

Trackman Rubber Track combines these three components into a fully molded, high-quality construction that delivers maximum performance in the environment for which it was designed. This fully molded construction allows each component to be designed for optimum performance, while simultaneously assuring outstanding product uniformity and integrity.

Trackman Rubber Track Construction

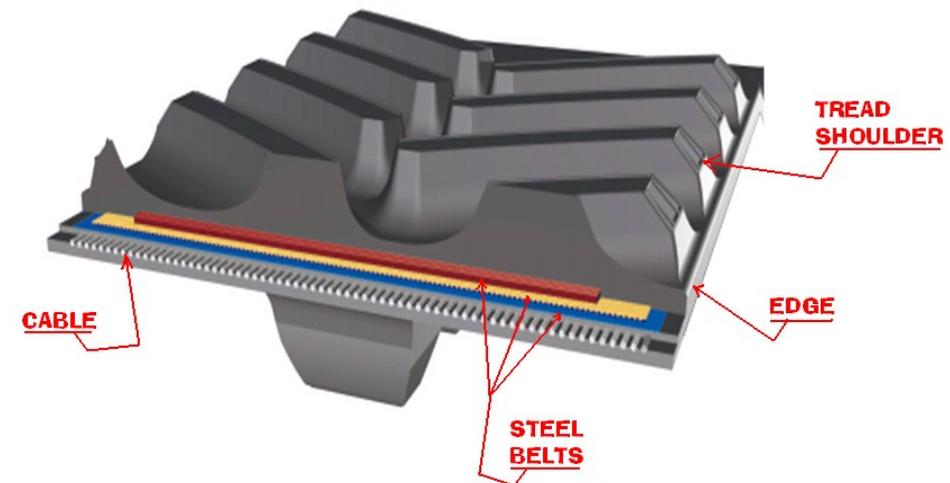
Main Exterior

- Tread Lugs - Ground Engaging, wearable surface
- Carcass - Foundation of track
- Guide/Drive Lugs - Primarily for retainment of track



Main Interior

- Steel Cable - Single cable, helically-wound
- Steel Belting - typically 3 – 4 layers



Rubber Track Suspension Systems

- Better, smoother ride
- Maximize the distribution of load
- Minimize the degree of penetration and compaction.
- Prohibit excessive loading on a single (or a specific group of) bogie wheel(s)
- Reduce the abusive "loading" caused by the ingestion of debris.



Friction Drive vs. Positive Drive

- **Friction Drive**
 - Track is driven solely by friction contact between track and drive wheel
 - High track tension minimizes wheel-to-track slip
 - Simplest undercarriage to manufacture



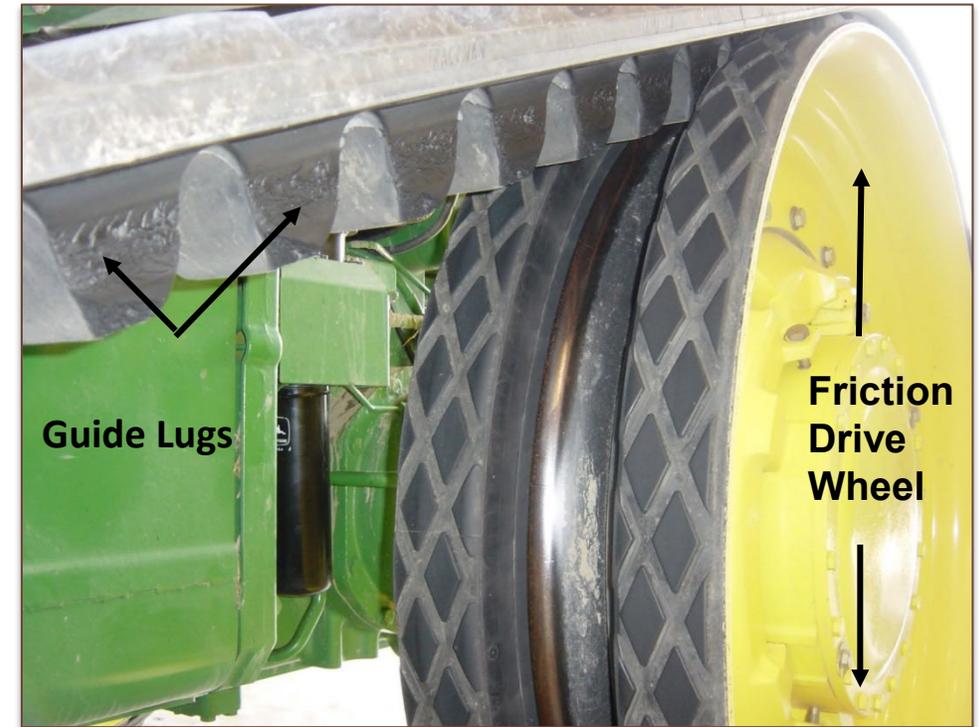
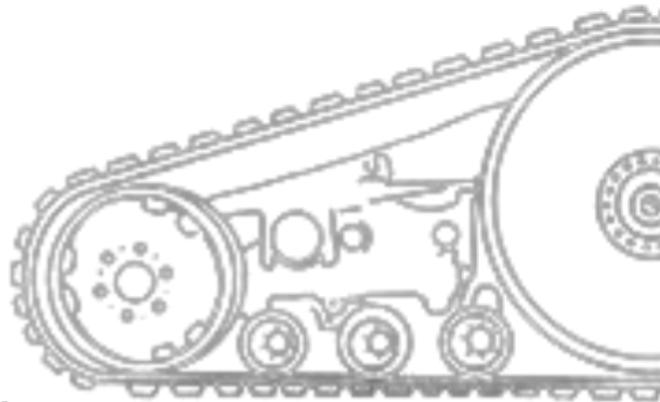
- **Positive drive**
 - Track drive/guide lugs engage “cogged” drive wheel
 - Wheel-to-Track Slip is completely prevented
 - Drive wheel and track require precise manufacturing



Friction Drive Track

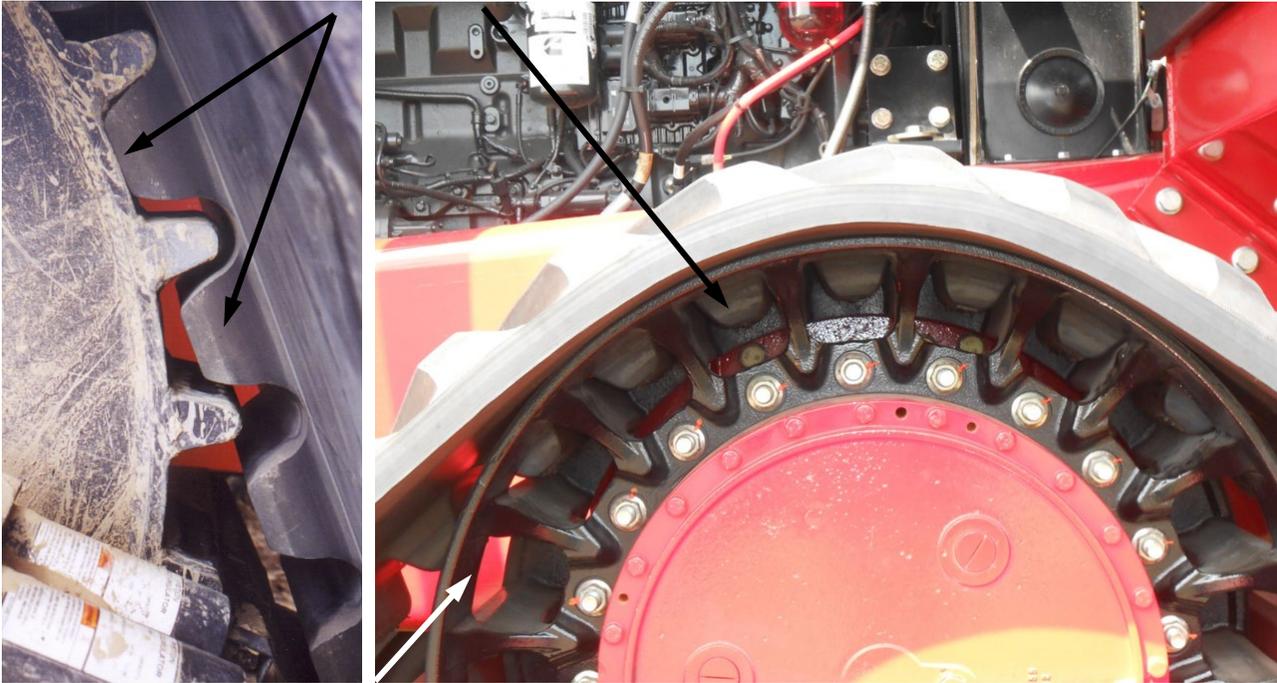
FRICTION DRIVE

The high level of friction between the rubber and the drive wheel and idler wheel forces the track to move forward as they turn.



Positive Drive Track

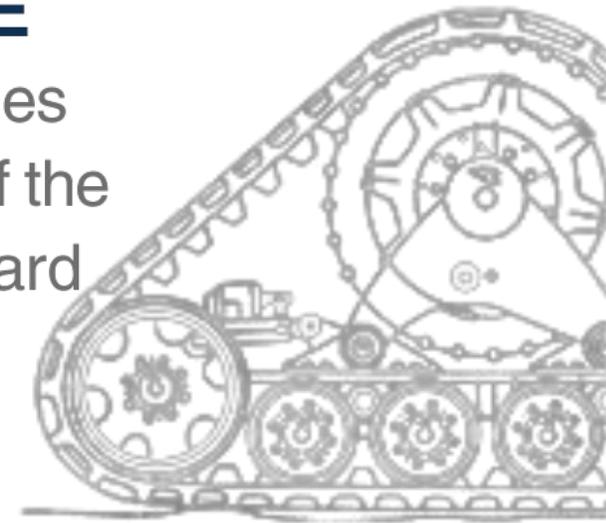
Positive Drive Lugs



Positive Drive Wheel

POSITIVE DRIVE

The sprocket engages with the drive lugs of the track driving it forward as it turns causing the track to move.



Typical Friction Drive Components



Roller Wheels

Idler Wheel

Drive Wheel

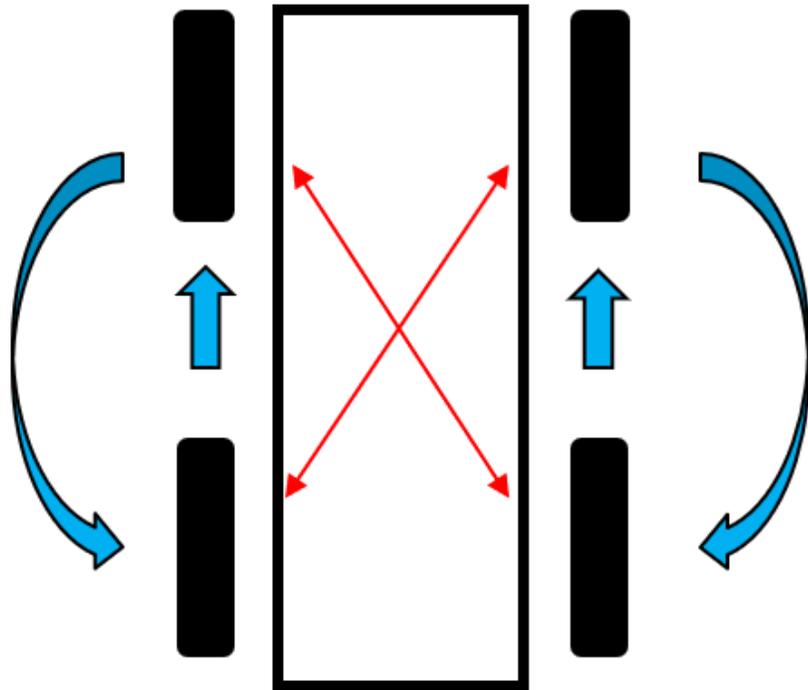
Typical Positive Drive Components



Track Rotation

- Depending upon specific working conditions track rotation may extend useful service life
- **Side to Side Rotation:** In applications (ie. sidehill, scraper work) where uneven lateral guide/drive lug wear may develop, and/or in cases where inboard/outboard tread lug wear is noticeably uneven
- **Front/Rear Rotation:** For positive drive systems, in conditions where drive lug engagement wear is noticeably different.

Four (4) track machine rotation example



FIRST ROTATION:

Interchange *left front* with *right rear* track.
Interchange *right front* with *left rear* track.

SECOND ROTATION (if needed):

Interchange *left front* with *left rear* track.
Interchange *right front* with *right rear* track.

Track Preconditioning

- New rubber tracks must be pre-conditioned before initial use.
 - Operating tracks without pre-conditioning will cause scuffing and damage to rubber contacting surfaces such as the track wheel path, guide/drive lugs and rubberized undercarriage wheels.
- Best method is to operate for at least 15 minutes in field with loose soil
- If this is not possible, prior to in-field use:
 - Spread layer of lubricating material over entire undercarriage wheels and inside of track. Use materials such as: Dirt, Oil Dry, Talc Powder, Graphite, or any non-caustic particulate material. Drive vehicle forward to allow material to cover all critical areas of track and undercarriage.
 - When roading during this break-in time, throw lubricant / shovel-full of dirt in undercarriages before roading and every 30 minutes.
 - Tracks will continue to condition for first 150 hours.

NOTE: Always refer to the vehicle manufactures Operation and Maintenance Owners Manual for specific track conditioning procedures.

Track Preconditioning Cont...

- Tracks must be pre-conditioned before initial use.
 - Track and wheel rubber initially is “green” and tacky.
 - Operating tracks without lubrication will cause track scuffing.
- Best method is to operate for 15 minutes in field with loose soil
- If this is not possible:
 - Spread layer of lubricating material over entire undercarriage wheels and inside of track.
 - Dirt
 - Oil dry
 - Talc powder
 - Graphite
 - Any non caustic particulate material.
 - Drive slowly for 15 – 25 minutes.
- Tracks will continue to condition for first 150 hours.
 - When roading during this time, throw shovel-full of dirt / lubricant in undercarriages before roading and every 30 minutes.

Hard Surface Road Transporting

- Under certain conditions internal track temperatures can rise and result in permanent damage. The main factors that affect track heating are: total weight supported per track, vehicle speed, travel duration, ground/road surface conditions, ground contour, and ambient temperature. Tracks are most susceptible to overheating during roading. There are 3 levels of temperature damage which are:
 - Stage 1: Non visible. Heat generation has been high enough to permanently degrade the physical properties of the track. Track is still serviceable; however, the prior heating event will lessen the track's ability to resist general wear and tear in future.
 - Stage 2: Swelling. Visually or by feel, an observer can tell that the track shape has been distorted. The odor of overheated rubber may also be apparent. This indicates a loss of interior compound integrity. Track is non-serviceable and will need to be replaced.
 - Stage 3: Rupture. Very noticeable to the observer. Rupture occurs in swelled areas of track if vehicle continues excessive heat generating operation. Smoke billowing from track will normally accompany rupture. Track is non-serviceable and will need to be replaced.
- In order to avoid track damage due to overheating, Trackman recommends that customer refers to and follows vehicle manufacture operator instructions, as well as, any service bulletins regarding same subject matter.

Rubber Track Maintenance

- Inspect and service the undercarriage components frequently to ensure that there is no obvious damage, that the track is being tensioned properly, and that the track exhibits no unusual wear patterns that would indicate improper camber or alignment.
- Condition track prior to initial usage by spreading dirt, Dries-All, or a similar material over the undercarriage engaging surface of the track and running the machine for a brief time.
- Avoid operating rubber track in grease, oil, gasoline, diesel fuel or other petrol chemicals. Take care to avoid spilling these materials on track when servicing the undercarriage and/or the machine.
- Rotate tracks from side to side in applications where uneven lateral wear is seen (and where the undercarriage adjustments necessary to correct these wear patterns do not exist).
- Avoid excess amount of sharp and high-speed turns.
- Protect undercarriage from contact with large foreign objects.
- Contact Trackman by Loc Rubber Track Distributor for detailed information

Track Life

- Track life influences:
 - Mechanical damage
 - Roading %
 - Hard surface turning
 - Amount of slip
 - Amount of side slope use
 - Soil types
 - Track alignment
 - Crop residue
 - Undercarriage maintenance
- Track life typically determined by wear of drive lugs and traction lugs.
- Using differential locks helps distribute the power equally to each side of the axle and will cause tracks to wear more evenly.
- Consider rotation of tracks every (750 – 1250) hours, depending on drive lug and traction lug wear



Typical Drive Lug Mid-Life Wear

Track Replacement

- When replacing tracks on higher hour machines, inspect undercarriage components.
- Worn undercarriage components can lead to reduced track life
- Components to inspect include:
 - Roller wheel wear
 - Idler wheel wear
 - Bushing wear (“slop” in front pivot and undercarriage arms).
 - Suspension Blocks
 - Hydraulic tension check valves



Long Term Rubber Track Storage

- Store tracks in "dark" area, away from direct sunlight. Store indoors, or cover with opaque tarpaulin.
- Store tracks in "cool" (40°F to 60°F, 4.4°C to 15.5°C) area. Avoid storing at temperatures greater than 85°F (29.4°C) for extended periods.
- Store tracks in "relaxed" physical configurations. Store on edge, with bend radii greater than 30 inches and no back-bending.
- Store tracks in draft-free area. Store indoors, protect with tarpaulin if necessary.
- Store tracks in dry area. Store indoors or cover with waterproof tarpaulin.
- Do not store tracks in closed areas with electric devices that generate ozone (such as motors).
- Do not store tracks in closed areas with petrol chemicals or petrol chemical vapors.
- Do not paint tracks in an attempt to protect them from ozone, moisture or other elements.
- Provide CO, fire extinguishers or halon fire suppression systems in rubber track storage areas



Periodic Storage of Machine

- Avoid storing tracked machines in direct sunlight. Store indoors or cover tracks with opaque tarpaulin.
- Avoid storing tracked machines in standing water. Store indoors or cover tracks with waterproof tarpaulin.
- Machines stored resting on their tracks (rather than "blocked up") should be moved once a month.



Rubber Track - Agricultural Track Limited Warranty



AGRICULTURAL TRACK LIMITED WARRANTY

RUBBER TRACK

THE TRUSTED SOURCE FOR THE **TOUGHEST TRACK**



AGRICULTURAL TRACK LIMITED WARRANTY

Eligibility

You are eligible for the benefits of this limited warranty if you are the original owner, or authorized agent of the original owner, of new Trackman agricultural service rubber tracks. This Limited Warranty is from Trackman.

Coverage

Trackman agricultural service rubber tracks that become unserviceable due to a covered warranty condition within 48 months or 2000 hours of service from their introduction into service are eligible for coverage under the Trackman agricultural rubber track limited warranty. Warranty consideration is applicable only to the track purchase price and does not include removal or installation charges, or any special, incidental, or consequential charges.

This limited warranty covers only tracks that bear proper Trackman identification, that have been used only on the equipment on which they were originally installed in accordance with the equipment manufacturer's or Trackman's recommendations.

Covered Conditions

- Guide/drive lug loss due to lack of adhesion.
- Delamination of tracks due to lack of adhesion resulting from the manufacturing process.
- Smooth void area in the interior of the tread lug.
- Tread lug separation with smooth interface between lug and carcass.

Not Covered

- Trackman agricultural service rubber track purchased more than 48 months prior to presentation for adjustment.
- Trackman rubber track designed for non-agricultural service.
- Tracks marked "Prototype."
- Prolonged on-road use. These tracks are not certified for such use by the United States Department of Transportation. Speeds must not exceed 25 mph (40 kph) or recommendation of OEM (whichever is lower).
- There is no warranty on tracks used on gear tooth drive systems.
- Irregular wear or damage due to cuts, scuffing, snags, machine malfunction or damage, wreck, collision, fire, chemical damage, overloading, misapplication, misuse, negligence, or mechanical condition of vehicle.
- Chunked, ripped or missing lugs caused by cuts from a sharp object or due to overloading.
- Guide/drive lug wear caused by improper alignment of the tracks. For example, if a tractor is run misaligned the idler wheel will rub against the inside of guide lug and friction will cause excessive temperature to build up. Excessive heat from the friction will cause rubber bonding to fail and chunking will occur.

- Guide/drive lug wear caused by running the track in extreme hillside conditions.
- Cable that is cut by a sharp object or implement.
- Exposed cables that are caused by:
 - Improper maintenance of mid-roller wheels
 - Interference from implements used in the application
 - Excessive slip between track and drive wheel

- Carcass failure caused by cuts to the rubber from rocks or implements that damage cables. The exposure of the cable to moisture, dirt and the elements will eventually cause corrosion and will make the track unserviceable.

- Conditions which impact the appearance of the rubber track but do not make the track unserviceable. Some examples include:

Exposed or frayed fabric

This may appear in guide/drive lug path area or drive wheel area. It is normal for the contact between drive wheels, idler wheels and mid-roller wheels to wear the rubber covering fabric reinforcement, causing exposure of fabric and for that fabric to fray as the track wears. Such frayed fabric may be an indication of improper alignment.

Tread flex cracking

Flex cracking occurs over time as a result of bending around drive, idler and mid-roller wheels.

- Small surface cracks will appear in most tracks after a few hundred hours of operation. Cracks usually appear on the track surface between tread lugs. This is normal wear.
- Surface cracking at base of tread lugs occurs as a normal part of wear.
- As tracks remain in operation, surface cracking will continue to spread.
- Tracks with surface cracks can continue to be used.

Guide/drive lug flex cracking

Cracking along guide/drive lugs is a normal part of wear and occurs over time as a result of bending around drive, idler and mid-roller wheels. This cracking will not affect operation of track.

- When track is first broken in, you may observe small cracks along outside edge of guide/drive lugs.
- As tracks remain in operation, cracking around guide/drive lugs will occur.
- As track ages the cracks around guide/drive lugs will continue to spread.
- Tracks with guide/drive lug flex cracking can continue to be used.

Prorated Replacement

Trackman agricultural rubber tracks covered by this limited warranty that become unserviceable due to a covered warranty condition outside of the no-charge replacement period (0-12 months and less than 1000 hours; see chart) and within 48 months from introduction into service will be replaced on a prorated basis. The warranty replacement price will be calculated by multiplying the manufacturer's suggested retail price (MSRP) by the percentage determined from the "Warranty Replacement Price Table" shown on the following chart.

Rubber Track - Agricultural Track Limited Warranty

Ag 4 year Warranty	Hours of Service			
Months of Service	0-1000	1001-1500	1501-2000	>2000
0-12 Months	0%	40%	70%	100%
12-24 Months	20%	50%	75%	100%
25-36 Months	40%	60%	80%	100%
37-48 Months	60%	80%	90%	100%

Introduction Into Service Date

The purchase date will be used to establish the date that tracks are introduced into service, or absent proof of purchase, the date of manufacture. The "months" above represent the number of months since introduction into service (either as an OEM factory installed option or as a replacement product). Example: The MSRP = \$6000. Track Age = 20 months. Based upon the table, the owner of the warranty track will pay 50% x \$6000 = \$3000 for a replacement warranty track.

Track Service Life

The service life of any specific track cannot be predicted in terms of hours of use since service conditions vary widely. The wear rate and serviceability of a track over time is a function of the service conditions (load, speed, maintenance, operating and soil conditions, etc.) to which a track is subjected. Even if operating conditions and tractor and track maintenance are identical, in different regions varying soils and ground surface will significantly affect track wear. Although little can be done to compensate for harsh soil conditions and their impact on track wear, proper servicing, proper alignment of track to undercarriage, regular inspections and regular maintenance are key to receiving the maximum benefit from your tracks. Although traction may be reduced, the loss of one or several tread lugs because of cuts or shearing will not prevent your track from operating.

If one or several lugs are only partially cut off and flapping occurs, we recommend that the loose portion of the lug be cut off as soon as possible to prevent tearing down further into the track. You may continue using your track normally as long as cuts or rips do not extend down to the cable. Operators should check their track each day and note any major cuts or damage that may have occurred during previous operation. A common indication of a cut or foreign object damage to guide/drive lugs or tread lugs is the appearance of several damaged lugs or tread in the same area, or a repeating pattern of damage.

Legal Rights

No representative or dealer has authority to make any representation, promise or agreement or modification to this warranty on behalf of Continental except as stated herein.

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION PRINTED ABOVE AND TRACKMAN DOES NOT IN ANY WAY WARRANT THE FITNESS OF THE TRACKS FOR ANY PARTICULAR PURPOSE. ALL WARRANTIES IMPLIED BY STATE LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE. Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. **WITH THE EXCEPTION OF ANY WARRANTIES REQUIRED BY STATE LAW, AS HEREBY LIMITED, THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS AND SIMILAR OBLIGATIONS OF TRACKMAN WITH RESPECT TO ANY TRACK.**

TRACKMAN'S LIABILITY AND PURCHASER'S SOLE REMEDY, WHETHER IN CONTRACT, UNDER ANY WARRANTY, IN TORT (INCLUDING NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE SHALL BE LIMITED TO THE REPLACEMENT OF THE TRACKS. UNDER NO CIRCUMSTANCES SHALL CONTINENTAL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, DAMAGE OR LOSS OF EQUIPMENT, LOST PROFITS OR REVENUE, COSTS OF RENTING REPLACEMENTS AND OTHER ADDITIONAL EXPENSES, EVEN IF TRACKMAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TRACKMAN WILL NOT BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES AS A RESULT OF THE END USER'S NEGLIGENCE, WHETHER DEEMED ACTIVE OR PASSIVE AND WHETHER OR NOT ANY SUCH NEGLIGENCE IS THE SOLE CAUSE OF ANY SUCH DAMAGE, LOSS OR EXPENSE.

Any track, no matter how well-constructed, may fail in service or otherwise become unserviceable due to conditions beyond the control of the manufacturer. This limited warranty is not a representation that a track failure cannot occur. This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state or province to province.

Owner's Obligation

The track owner, or authorized agent of the track owner, must present the unserviceable track and proof of purchase to a participating dealership. The track owner or authorized agent must also completely fill out and sign a Trackman Rubber Track Claim Form. This claim form must be accompanied by a clear and visible photograph of the warranty condition that made the track unserviceable. These should be sent to Trackman's warranty administrator. The track owner or authorized agent must pay for taxes, installation or any other additional service ordered at the time of adjustment. Warranty track must be purchased within 90 days of Trackman's approval of the warranty claim.

Filing Instructions

All warranty claim forms must be accompanied by a valid Trackman Rubber Track Claim Form, which includes:

- TM number of the track/AU Number/Hours of Service for track
- Date of track purchase
- Date track became unserviceable
- Picture of condition that rendered track unserviceable
- Picture of equipment on which track was operating

The track TM number will be found on the rubber track either embossed on the inside wheel path of the track and/or molded on the top of several of the guide/drive lugs. The TM number begins with the letters "TM" followed by 6 numeric digits (example: TM236167).

In order for claims to be processed, the dealer must submit the completed claim form and the photographs to:

Trackman
Attn: Warranty Department
1115 S. Wayne Street, St. Marys, OH 45885

Or via e-mail:
trackman-warranty@rheinmetall-arv-us.com



Contact

Trackman – part of American Rheinmetall
1115 S. Wayne Street
St. Marys, Ohio 45885 U.S.A.

1-855-675-3375
Warranty@TrackmanTracks.com



Rubber Track - Scraper Track Limited Warranty



SCRAPER TRACK LIMITED WARRANTY

RUBBER TRACK

THE TRUSTED SOURCE FOR THE **TOUGHEST TRACK**



RUBBER TRACK SCRAPER TRACK LIMITED WARRANTY

Eligibility

You are eligible for the benefits of this limited warranty if you are the original owner, or authorized agent of the original owner, of new Trackman scraper service rubber tracks. This Limited Warranty is from Trackman.

Coverage

Trackman scraper service rubber tracks that become unserviceable due to a covered warranty condition within 24 months or 1000 hours of service from their introduction into service are eligible for coverage under the Trackman scraper rubber track limited warranty. Warranty consideration is applicable only to the track purchase price and does not include removal or installation charges, or any special, incidental, or consequential charges. This limited warranty covers only tracks that bear proper Trackman identification, that have been used only on the equipment on which they were originally installed in accordance with the equipment manufacturer's or Trackman's recommendations.

Covered Conditions

- Guide/drive lug loss due to lack of adhesion.
- Delamination of tracks due to lack of adhesion resulting from the manufacturing process.
- Smooth void area in the interior of the tread lug.
- Tread lug separation with smooth interface between lug and carcass.

Not Covered

- Trackman scraper service rubber track purchased more than 24 months prior to presentation for adjustment.
- Trackman rubber tracks designed for non-scraper service.
- Tracks marked "Prototype."
- Prolonged on-road use. These tracks are not certified for such use by the United States Department of Transportation. Speeds must not exceed 25 mph (40 kph) or recommendation of OEM (whichever is lower).
- There is no warranty on tracks used on gear tooth drive systems.
- Irregular wear or damage due to cuts, scuffing, snags, machine malfunction or damage, wreck, collision, fire, chemical damage, overloading, misapplication, misuse, negligence, or mechanical condition of vehicle.
- Chunked, ripped or missing lugs caused by cuts from a sharp object or due to overloading.
- Guide/drive lug wear caused by improper alignment of the tracks. For example, if a tractor is run misaligned the idler wheel will rub against the inside of guide lug and friction will cause excessive temperature to build up. Excessive heat from the friction will cause rubber bonding to fail and chunking will occur.

- Guide/drive lug wear caused by running the track in extreme hillside conditions.
- Cable that is cut by a sharp object or implement.
- Exposed cables that are caused by:
 - Improper maintenance of mid-roller wheels
 - Interference from implements used in the application
 - Excessive slip between track and drive wheel
- Carcass failure caused by cuts to the rubber from rocks or implements that damage cables. The exposure of the cable to moisture, dirt and the elements will eventually cause corrosion and will make the track unserviceable.
- Conditions which impact the appearance of the rubber track but do not make the track unserviceable. Some examples include:

Exposed or frayed fabric

This may appear in guide/drive lug path area or drive wheel area. It is normal for the contact between drive wheels, idler wheels and mid-roller wheels to wear the rubber covering fabric reinforcement, causing exposure of fabric and for that fabric to fray as the track wears. Such frayed fabric may be an indication of improper alignment.

Tread flex cracking

Flex cracking occurs over time as a result of bending around drive, idler and mid-roller wheels.

- Small surface cracks will appear in most tracks after a few hundred hours of operation. Cracks usually appear on the track surface between tread lugs. This is normal wear.
- Surface cracking at base of tread lugs occurs as a normal part of wear.
- As tracks remain in operation, surface cracking will continue to spread.
- Tracks with surface cracks can continue to be used.

Guide/drive lug flex cracking

Cracking along guide/drive lugs is a normal part of wear and occurs over time as a result of bending around drive, idler and mid-roller wheels. This cracking will not affect operation of track.

- When track is first broken in, you may observe small cracks along outside edge of guide/drive lugs.
- As tracks remain in operation, cracking around guide/drive lugs will occur.
- As track ages the cracks around guide/drive lugs will continue to spread.
- Tracks with guide/drive lug flex cracking can continue to be used.

Prorated Replacement

Trackman scraper rubber tracks covered by this limited warranty that become unserviceable due to a covered warranty condition outside of the no-charge replacement period (0-12 months and less than 500 hours; see chart) and within 24 months from introduction into service will be replaced on a prorated basis. The warranty replacement price will be calculated by multiplying the manufacturer's suggested retail price (MSRP) by the percentage determined from the "Warranty Replacement Price Table" shown on the following chart:

Rubber Track - Scraper Track Limited Warranty

2 year Scraper		Hours of Service			
Months of Service	0-500	501-750	751-1000	>1000	
0-12 Months	0%	40%	70%	100%	
13-24 Months	40%	60%	80%	100%	

Introduction Into Service Date

The purchase date will be used to establish the date that tracks are introduced into service, or absent proof of purchase, the date of manufacture. The "months" above represent the number of months since introduction into service (either as an OEM factory installed option or as a replacement product). Example: The MSRP = \$6000. Track Age = 20 months, with less than 500 hours. Based upon the table, the owner of the warranty track will pay 40% x \$6000 = \$2400 for a replacement warranty track.

Track Service Life

The service life of any specific track cannot be predicted in terms of hours of use since service conditions vary widely. The wear rate and serviceability of a track over time is a function of the service conditions (load, speed, maintenance, operating and soil conditions, etc.) to which a track is subjected. Even if operating conditions and tractor and track maintenance are identical, in different regions varying soils and ground surface will significantly affect track wear. Although little can be done to compensate for harsh soil conditions and their impact on track wear, proper servicing, proper alignment of track to undercarriage, regular inspections and regular maintenance are key to receiving the maximum benefit from your tracks.

Although traction may be reduced, the loss of one or several tread lugs because of cuts or shearing will not prevent your track from operating. If one or several lugs are only partially cut off and flapping occurs, we recommend that the loose portion of the lug be cut off as soon as possible to prevent tearing down further into the track. You may continue using your track normally as long as cuts or rips do not extend down to the cable.

Operators should check their track each day and note any major cuts or damage that may have occurred during previous operation. A common indication of a cut or foreign object damage to guide/drive lugs or tread lugs is the appearance of several damaged lugs or tread in the same area, or a repeating pattern of damage.

Legal Rights

No representative or dealer has authority to make any representation, promise or agreement or modification to this warranty on behalf of Trackman except as stated herein. **THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION PRINTED ABOVE AND TRACKMAN DOES NOT IN ANY WAY WARRANT THE FITNESS OF THE TRACKS FOR ANY PARTICULAR PURPOSE. ALL WARRANTIES IMPLIED BY STATE LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE.** Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. **WITH THE EXCEPTION OF ANY WARRANTIES REQUIRED BY STATE LAW, AS HEREBY LIMITED, THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS AND SIMILAR OBLIGATIONS OF TRACKMAN WITH RESPECT TO ANY TRACK. TRACKMAN'S LIABILITY AND PURCHASER'S SOLE REMEDY, WHETHER IN CONTRACT, UNDER ANY WARRANTY, IN TORT**

(INCLUDING NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE SHALL BE LIMITED TO THE REPLACEMENT OF THE TRACKS. UNDER NO CIRCUMSTANCES SHALL TRACKMAN BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, DAMAGE OR LOSS OF EQUIPMENT, LOST PROFITS OR REVENUE, COSTS OF RENTING REPLACEMENTS AND OTHER ADDITIONAL EXPENSES, EVEN IF TRACKMAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TRACKMAN WILL NOT BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES AS A RESULT OF THE END USER'S NEGLIGENCE, WHETHER DEEMED ACTIVE OR PASSIVE AND WHETHER OR NOT ANY SUCH NEGLIGENCE IS THE SOLE CAUSE OF ANY SUCH DAMAGE, LOSS OR EXPENSE.

Any track, no matter how well-constructed, may fail in service or otherwise become unserviceable due to conditions beyond the control of the manufacturer. This limited warranty is not a representation that a track failure cannot occur.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state or province to province.

Owner's Obligation

The track owner, or authorized agent of the track owner, must present the unserviceable track and proof of purchase to a participating dealership. The track owner or authorized agent must also completely fill out and sign a Trackman Rubber Track Claim Form. This claim form must be accompanied by a clear and visible photograph of the warranty condition that made the track unserviceable. These should be sent to Trackman's warranty administrator. The track owner or authorized agent must pay for taxes, installation or any other additional service ordered at the time of adjustment. Warranty track must be purchased within 90 days of Trackman's approval of the warranty claim.

Filing Instructions

All warranty claim forms must be accompanied by a valid Trackman Rubber Track Claim Form, which includes:

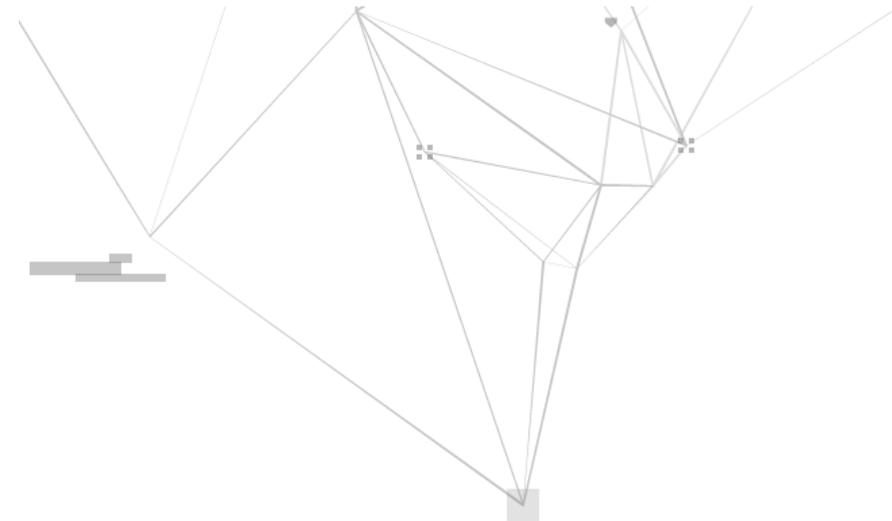
- TM number of the track/AU Number/Hours of Service for track
- Date of track purchase
- Date track became unserviceable
- Picture of condition that rendered track unserviceable
- Picture of equipment on which track was operating

The track TM number will be found on the rubber track either embossed on the inside wheel path of the track and/or molded on the top of several of the guide/drive lugs. The TM number begins with the letters "TM" followed by 6 numeric digits (example: TM236167).

In order for claims to be processed, the dealer must submit the completed claim form and the photographs to:

Trackman
Attn: Warranty Department
1115 S. Wayne Street, St. Marys, OH 45885

Or via e-mail:
trackman-warranty@rheinmetall-arg-us.com



Contact
Trackman – part of American Rheinmetall
1115 S. Wayne Street
St. Marys, Ohio 45885 U.S.A.
1-855-675-3375
Warranty@TrackmanTracks.com



Rubber Track | T800 Agricultural Track Limited Warranty



AGRICULTURAL ARMORLUG ULTRA T800 LIMITED WARRANTY

RUBBER TRACK

THE TRUSTED SOURCE FOR THE TOUGHEST TRACK



AGRICULTURAL ARMORLUG ULTRA T800 TRACK LIMITED WARRANTY

Eligibility

You are eligible for the benefits of this limited warranty if you are the original owner, or authorized agent of the original owner, of new Trackman agricultural ARMORLUG ULTRA T800 service rubber tracks. This Limited Warranty is from Trackman.

Coverage

Trackman agricultural ARMORLUG ULTRA T800 service rubber tracks that become unserviceable due to a covered warranty condition within 60 months and 2500 hours of service from their introduction into service are eligible for coverage under the Trackman agricultural ARMORLUG ULTRA T800 rubber track limited warranty. Warranty consideration is applicable only to the track purchase price and does not include removal or installation charges, or any special, incidental, or consequential charges. This limited warranty covers only tracks that bear proper Trackman identification, that have been used only on the equipment on which they were originally installed in accordance with the equipment manufacturer's or Trackman's recommendations.

Covered Conditions

- Guide/drive lug loss due to lack of adhesion.
- Delamination of tracks due to lack of adhesion resulting from the manufacturing process.
- Smooth void area in the interior of the tread lug.
- Tread lug separation with smooth interface between lug and carcass.

Not Covered

- Trackman agricultural ARMORLUG ULTRA T800 service rubber track purchased more than 60 months prior to presentation for adjustment.
- Trackman rubber track designed for non-agricultural or standard agricultural service.
- Tracks marked "Prototype."
- Prolonged on-road use. These tracks are not certified for such use by the United States Department of Transportation. Speeds must not exceed 25 mph (40 kph) or recommendation of OEM (whichever is lower).
- There is no warranty on tracks used on gear tooth drive systems.
- Irregular wear or damage due to cuts, scuffing, snags, machine malfunction or damage, wreck, collision, fire, chemical damage, overloading, misapplication, misuse, negligence, or mechanical condition of vehicle.
- Chunked, ripped or missing lugs caused by cuts from a sharp object or due to overloading.
- Guide/drive lug wear caused by improper alignment of the tracks. For example, if a tractor is run misaligned the idler wheel will rub against the inside of guide lug and friction will cause excessive temperature to build up. Excessive heat from

the friction will cause rubber bonding to fail and chunking will occur.

- Guide/drive lug wear caused by running the track in extreme hillside conditions.
- Cable that is cut by a sharp object or implement.
- Exposed cables that are caused by:
 - Improper maintenance of mid-roller wheels
 - Interference from implements used in the application
- Carcass failure caused by cuts to the rubber from rocks or implements that damage cables. The exposure of the cable to moisture, dirt and the elements will eventually cause corrosion and will make the track unserviceable.
- Conditions which impact the appearance of the rubber track but do not make the track unserviceable. Some examples include:

Exposed or frayed fabric

This may appear in guide/drive lug path area or drive wheel area. It is normal for the contact between drive wheels, idler wheels and mid-roller wheels to wear the rubber covering fabric reinforcement, causing exposure of fabric and for that fabric to fray as the track wears. Such frayed fabric may be an indication of improper alignment.

Tread flex cracking

Flex cracking occurs over time as a result of bending around drive, idler and mid-roller wheels.

- Small surface cracks will appear in most tracks after a few hundred hours of operation. Cracks usually appear on the track surface between tread lugs. This is normal wear.
- Surface cracking at base of tread lugs occurs as a normal part of wear.
- As tracks remain in operation, surface cracking will continue to spread.
- Tracks with surface cracks can continue to be used.

Guide/drive lug flex cracking

Cracking along guide/drive lugs is a normal part of wear and occurs over time as a result of bending around drive, idler and mid-roller wheels. This cracking will not affect operation of track.

- When track is first broken in, you may observe small cracks along outside edge of guide/drive lugs.
- As tracks remain in operation, cracking around guide/drive lugs will occur.
- As track ages the cracks around guide/drive lugs will continue to spread.
- Tracks with guide/drive lug flex cracking can continue to be used.

Prorated Replacement

Trackman agricultural rubber tracks covered by this limited warranty that become unserviceable due to a covered warranty condition outside of the no-charge replacement period (0-12 months and less than 1001 service hours; see chart) and within 60 months and 2500 service hours from introduction into service will be replaced on a prorated basis. The warranty replacement price will be calculated by multiplying the manufacturer's suggested retail price (MSRP) by the percentage determined from the "Warranty Replacement Price Table" shown on the below chart.

Rubber Track - T800 Agricultural Track Limited Warranty

5 year Ag Ultra T800	Hours of Service				
Months of Service	0-1000	1001-1500	1501-2000	2001-2500	>2500
0-12 Months	0%	40%	70%	90%	100%
13-24 Months	20%	50%	75%	80%	100%
25-36 Months	40%	60%	80%	85%	100%
37-48 Months	60%	80%	90%	95%	100%
49-60 Months	70%	85%	95%	95%	100%

Introduction Into Service Date

The purchase date will be used to establish the date that tracks are introduced into service, or absent proof of purchase, the date of manufacture. The "months" represent the number of months since introduction into service (either as an OEM factory installed option or as a replacement product). Example: The MSRP = \$10,000. Track Age = 20 months and 1250 service hours. Based upon the table, the owner of the warranty track will pay 50% - \$10,000 = \$5,000 for a replacement warranty track.

Track Service Life

The service life of any specific track cannot be predicted in terms of hours of use since service conditions vary widely. The wear rate and serviceability of a track over time is a function of the service conditions (load, speed, maintenance, operating and soil conditions, etc.) to which a track is subjected. Even if operating conditions and tractor and track maintenance are identical, in different regions varying soils and ground surface will significantly affect track wear. Although little can be done to compensate for harsh soil conditions and their impact on track wear, proper servicing, proper alignment of track to undercarriage, regular inspections and regular maintenance are key to receiving the maximum benefit from your tracks. Although traction may be reduced, the loss of one or several tread lugs because of cuts or shearing will not prevent your track from operating.

If one or several lugs are only partially cut off and flapping occurs, we recommend that the loose portion of the lug be cut off as soon as possible to prevent tearing down further into the track. You may continue using your track normally as long as cuts or rips do not extend down to the cable. Operators should check their track each day and note any major cuts or damage that may have occurred during previous operation. A common indication of a cut or foreign object damage to guide/drive lugs or tread lugs is the appearance of several damaged lugs or tread in the same area, or a repeating pattern of damage.

Legal Rights

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THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION PRINTED ABOVE AND TRACKMAN DOES NOT IN ANY WAY WARRANT THE FITNESS OF THE TRACKS FOR ANY PARTICULAR PURPOSE. ALL WARRANTIES IMPLIED BY STATE LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE. Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. **WITH THE EXCEPTION OF ANY WARRANTIES REQUIRED BY STATE LAW, AS HEREBY LIMITED, THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS AND SIMILAR OBLIGATIONS OF TRACKMAN WITH RESPECT TO ANY TRACK.**

TRACKMAN'S LIABILITY AND PURCHASER'S SOLE REMEDY, WHETHER IN CONTRACT, UNDER ANY WARRANTY, IN TORT (INCLUDING NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE SHALL BE LIMITED TO THE REPLACEMENT OF THE TRACKS. UNDER NO CIRCUMSTANCES SHALL CONTINENTAL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, DAMAGE OR LOSS OF EQUIPMENT, LOST PROFITS OR REVENUE, COSTS OF RENTING REPLACEMENTS AND OTHER ADDITIONAL EXPENSES, EVEN IF TRACKMAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TRACKMAN WILL NOT BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES AS A RESULT OF THE END USER'S NEGLIGENCE, WHETHER DEEMED ACTIVE OR PASSIVE AND WHETHER OR NOT ANY SUCH NEGLIGENCE IS THE SOLE CAUSE OF ANY SUCH DAMAGE, LOSS OR EXPENSE.

Any track, no matter how well-constructed, may fail in service or otherwise become unserviceable due to conditions beyond the control of the manufacturer. This limited warranty is not a representation that a track failure cannot occur.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state or province to province.

Owner's Obligation

The track owner, or authorized agent of the track owner, must present the unserviceable track and proof of purchase to a participating dealership. The track owner or authorized agent must also completely fill out and sign a Trackman Rubber Track Claim Form. This claim form must be accompanied by a clear and visible photograph of the warranty condition that made the track unserviceable. These should be sent to Trackman's warranty administrator. The track owner or authorized agent must pay for taxes, installation or any other additional service ordered at the time of adjustment. Warranty track must be purchased within 90 days of Trackman's approval of the warranty claim.

Filing Instructions

All warranty claim forms must be accompanied by a valid Trackman Rubber Track Claim Form, which includes:

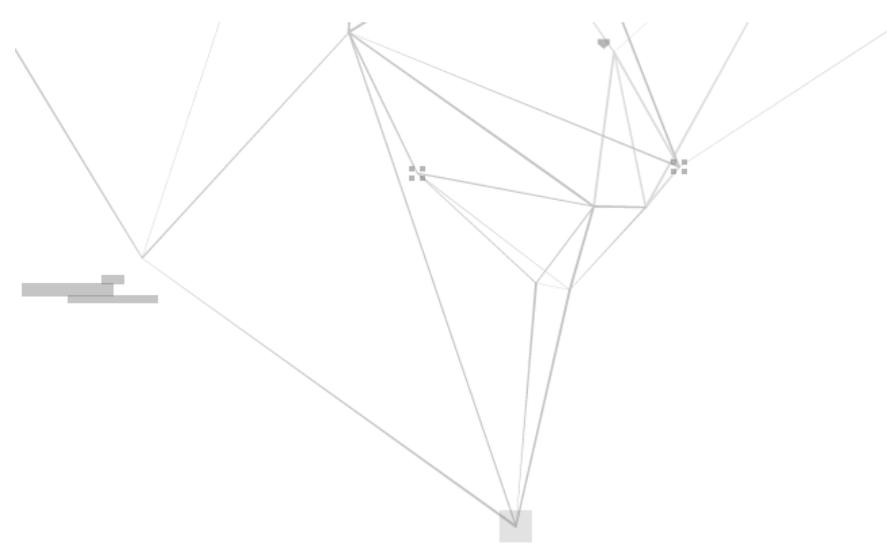
- TM number of the track/AU Number/Hours of Service for track
- Date of track purchase
- Date track became unserviceable
- Picture of condition that rendered track unserviceable
- Picture of equipment on which track was operating

The track TM number will be found on the rubber track either embossed on the inside wheel path of the track and/or molded on the top of several of the guide/drive lugs. The TM number begins with the letters "TM" followed by 6 numeric digits (example: TM236167).

In order for claims to be processed, the dealer must submit the completed claim form and the photographs to:

Trackman
Attn: Warranty Department
1115 S. Wayne Street, St. Marys, OH 45885

Or via e-mail:
trackman-warranty@rheinmetall-arv-us.com



Contact
Trackman – part of American Rheinmetall
1115 S. Wayne Street
St. Marys, Ohio 45885 U.S.A.
1-855-675-3375
Warranty@TrackmanTracks.com



Rubber Track - T800 Scraper Track Limited Warranty



AMORLUG ULTRA T800 TRACK LIMITED WARRANTY

RUBBER TRACK SCRAPER

THE TRUSTED SOURCE FOR THE **TOUGHEST TRACK**



RUBBER TRACK SCRAPER ARMORLUG ULTRA T800 TRACK LIMITED WARRANTY

Eligibility

You are eligible for the benefits of this limited warranty if you are the original owner, or authorized agent of the original owner, of new Trackman scraper ARMORLUG ULTRA T800 service rubber tracks. This Limited Warranty is from Trackman.

Coverage

Trackman scraper ARMORLUG ULTRA T800 service rubber tracks that become unserviceable due to a covered warranty condition within 36 months and 2500 hours of service from their introduction into service are eligible for coverage under the Trackman scraper ARMORLUG ULTRA T800 rubber track limited warranty. Warranty consideration is applicable only to the track purchase price and does not include removal or installation charges, or any special, incidental, or consequential charges. This limited warranty covers only tracks that bear proper Trackman identification, that have been used only on the equipment on which they were originally installed in accordance with the equipment manufacturer's or Trackman's recommendations.

Covered Conditions

- Guide/drive lug loss due to lack of adhesion.
- Delamination of tracks due to lack of adhesion resulting from the manufacturing process.
- Smooth void area in the interior of the tread lug.
- Tread lug separation with smooth interface between lug and carcass.

Not Covered

- Trackman scraper ARMORLUG ULTRA T800 service rubber track purchased more than 36 months prior to presentation for adjustment.
- Trackman rubber track designed for agricultural service or standard scraper service.
- Tracks marked "Prototype."
- Prolonged on-road use. These tracks are not certified for such use by the United States Department of Transportation. Speeds must not exceed 25 mph (40 kph) or recommendation of OEM (whichever is lower).
- There is no warranty on tracks used on gear tooth drive systems.
- Irregular wear or damage due to cuts, scuffing, snags, machine malfunction or damage, wreck, collision, fire, chemical damage, overloading, misapplication, misuse, negligence, or mechanical condition of vehicle.
- Chunked, ripped or missing lugs caused by cuts from a sharp object or due to overloading.

- Guide/drive lug wear caused by improper alignment of the tracks. For example, if a tractor is run misaligned the idler wheel will rub against the inside of guide lug and friction will cause excessive temperature to build up. Excessive heat from the friction will cause rubber bonding to fail and chunking will occur.
- Guide/drive lug wear caused by running the track in extreme hillside conditions.
- Cable that is cut by a sharp object or implement.
- Exposed cables that are caused by:
 - Improper maintenance of mid-roller wheels
 - Interference from implements used in the application
- Carcass failure caused by cuts to the rubber from rocks or implements that damage cables. The exposure of the cable to moisture, dirt and the elements will eventually cause corrosion and will make the track unserviceable.
- Conditions which impact the appearance of the rubber track but do not make the track unserviceable. Some examples include:

Exposed or frayed fabric

This may appear in guide/drive lug path area or drive wheel area. It is normal for the contact between drive wheels, idler wheels and mid-roller wheels to wear the rubber covering fabric reinforcement, causing exposure of fabric and for that fabric to fray as the track wears. Such frayed fabric may be an indication of improper alignment.

Tread flex cracking

Flex cracking occurs over time as a result of bending around drive, idler and mid-roller wheels.

- Small surface cracks will appear in most tracks after a few hundred hours of operation. Cracks usually appear on the track surface between tread lugs. This is normal wear.
- Surface cracking at base of tread lugs occurs as a normal part of wear.
- As tracks remain in operation, surface cracking will continue to spread.
- Tracks with surface cracks can continue to be used.

Guide/drive lug flex cracking

Cracking along guide/drive lugs is a normal part of wear and occurs over time as a result of bending around drive, idler and mid-roller wheels. This cracking will not affect operation of track.

- When track is first broken in, you may observe small cracks along outside edge of guide/drive lugs.
- As tracks remain in operation, cracking around guide/drive lugs will occur.
- As track ages the cracks around guide/drive lugs will continue to spread.
- Tracks with guide/drive lug flex cracking can continue to be used.

Prorated Replacement

Trackman scraper ARMORLUG ULTRA T800 rubber tracks covered by this limited warranty that become unserviceable due to a covered warranty condition outside of the no-charge replacement period (0-12 months; see chart) and within 36 months and 1250 service hours from introduction into service will be replaced on a prorated basis. The warranty replacement price will be calculated

Rubber Track - T800 Scraper Track Limited Warranty

3 Year Scraper Ultra T800		Hours of Service				
Months of Service	0-500	501-750	751-1000	1001-1250	>1250	
0-12 Months	0%	40%	70%	90%	100%	
13-24 Months	20%	50%	75%	90%	100%	
25-36 Months	40%	60%	80%	90%	100%	

by multiplying the manufacturer's suggested retail price (MSRP) by the percentage determined from the "Warranty Replacement Price Table" shown on the following chart:

Introduction Into Service Date

The purchase date will be used to establish the date that tracks are introduced into service, or absent proof of purchase, the date of manufacture. The "months" above represent the number of months since introduction into service (either as an OEM factory installed option or as a replacement product). Example: The MSRP = \$6000. Track Age = 20 months. Based upon the table, the owner of the warranty track will pay 55% x \$6,000 = \$3,300 for a replacement warranty track.

Track Service Life

The service life of any specific track cannot be predicted in terms of hours of use since service conditions vary widely. The wear rate and serviceability of a track over time is a function of the service conditions (load, speed, maintenance, operating and soil conditions, etc.) to which a track is subjected. Even if operating conditions and tractor and track maintenance are identical, in different regions varying soils and ground surface will significantly affect track wear. Although little can be done to compensate for harsh soil conditions and their impact on track wear, proper servicing, proper alignment of track to undercarriage, regular inspections and regular maintenance are key to receiving the maximum benefit from your tracks.

Although traction may be reduced, the loss of one or several tread lugs because of cuts or shearing will not prevent your track from operating. If one or several lugs are only partially cut off and flapping occurs, we recommend that the loose portion of the lug be cut off as soon as possible to prevent tearing down further into the track. You may continue using your track normally as long as cuts or rips do not extend down to the cable. Operators should check their track each day and note any major cuts or damage that may have occurred during previous operation. A common indication of a cut or foreign object damage to guide/drive lugs or tread lugs is the appearance of several damaged lugs or tread in the same area, or a repeating pattern of damage.

Legal Rights

No representative or dealer has authority to make any representation, promise, agreement, or modification to this warranty on behalf of Trackman except as stated herein. **THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION PRINTED ABOVE AND TRACKMAN DOES NOT IN ANY WAY WARRANT THE FITNESS OF THE TRACKS FOR ANY PARTICULAR PURPOSE. ALL WARRANTIES IMPLIED BY STATE LAW, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE LIMITED WARRANTIES SET FORTH ABOVE.** Some states or provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. **WITH THE EXCEPTION OF ANY WARRANTIES REQUIRED BY STATE LAW, AS HEREBY LIMITED, THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, AGREEMENTS AND SIMILAR OBLIGATIONS OF TRACKMAN WITH RESPECT TO ANY TRACK.**

TRACKMAN'S LIABILITY AND PURCHASER'S SOLE REMEDY, WHETHER IN CONTRACT, UNDER ANY WARRANTY, IN TORT (INCLUDING NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE SHALL BE LIMITED TO THE REPLACEMENT OF THE TRACKS. UNDER NO CIRCUMSTANCES SHALL TRACKMAN BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, PERSONAL INJURY, PROPERTY DAMAGE, DAMAGE OR LOSS OF EQUIPMENT, LOST PROFITS OR REVENUE, COSTS OF RENTING REPLACEMENTS AND OTHER ADDITIONAL EXPENSES, EVEN IF TRACKMAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

TRACKMAN WILL NOT BE LIABLE FOR ANY DAMAGES, LOSSES OR EXPENSES AS A RESULT OF THE END USER'S NEGLIGENCE, WHETHER DEEMED ACTIVE OR PASSIVE AND WHETHER OR NOT ANY SUCH NEGLIGENCE IS THE SOLE CAUSE OF ANY SUCH DAMAGE, LOSS OR EXPENSE.

Any track, no matter how well-constructed, may fail in service or otherwise become unserviceable due to conditions beyond the control of the manufacturer. This limited warranty is not a representation that a track failure cannot occur.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state or province to province.

Owner's Obligation

The track owner, or authorized agent of the track owner, must present the unserviceable track and proof of purchase to a participating dealership. The track owner or authorized agent must also completely fill out and sign a Trackman Rubber Track Claim Form. This claim form must be accompanied by a clear and visible photograph of the warranty condition that made the track unserviceable. These should be sent to Trackman's warranty administrator. The track owner or authorized agent must pay for taxes, installation or any other additional service ordered at the time of adjustment. Warranty track must be purchased within 90 days of Trackman's approval of the warranty claim.

Filing Instructions

All warranty claim forms must be accompanied by a valid Trackman Rubber Track Claim Form, which includes:

- TM number of the track/AU Number/Hours of Service for track
- Date of track purchase
- Date track became unserviceable
- Picture of condition that rendered track unserviceable
- Picture of equipment on which track was operating

The track TM number will be found on the rubber track either embossed on the inside wheel path of the track and/or molded on the top of several of the guide/drive lugs. The TM number begins with the letters "TM" followed by 6 numeric digits (example: TM296167).

In order for claims to be processed, the dealer must submit the completed claim form and the photographs to:

Trackman
Attn: Warranty Department
1115 S. Wayne Street, St. Marys, OH 45885

Or via e-mail:
trackman-warranty@rheinmetall-arv-us.com



Contact

Trackman – part of American Rheinmetall
1115 S. Wayne Street
St. Marys, Ohio 45885 U.S.A.

1-855-675-3375
Warranty@TrackmanTracks.com



Trackman Approved Agricultural Track Warranty

COVERAGE:

- Tracks that become unserviceable due to a covered warranty condition within 48 months (12 months for general applications 24 months for approved scraper tracks & 36 months for approved paver tracks) from their introduction into service
- Warranty consideration does not include removal or installation charges, or any special, incidental, or consequential charges.
- Only tracks that bear proper Trackman identification and:
- Have been used only on the vehicle on which they were originally installed in accordance with the vehicle manufacturer's or Trackman recommendations
- Were purchased on or after January 1,2005.

NO CHARGE (N/C) REPLACEMENT:

- First twelve months of service
- Replaced with comparable new Trackman by Loc rubber track without charge.

PRORATED REPLACEMENT:

- Outside of the no charge replacement period and within 48 months (12 months for general applications, 24 months for scraper tracks & 36 months for paver tracks) from introduction into service
- Customer charge will be calculated by multiplying the customer's current buying price, at the time of adjustment, by the percentage from the "Warranty Replacement Percentage Table."

Warranty Review

INTRODUCTION INTO SERVICE DATE:

- Proof of purchase date will be used to establish the service date
- Date of track manufacture will be used if proof of purchase is not available.

NOT COVERED:

- Track purchased more than 48 months (12 mos. general service, 24 mos. for scraper tracks & 36 mos. for paver tracks) prior to presentation for adjustment
- Track designed for non-agricultural, non-scraper, or non-paver service (as applicable)
- Track used in non-agricultural service including but not limited to land' leveling, road construction, general construction and military service.
- Irregular wear or damage due to cuts, snags, machine damage, wreck, collision, fire, chemical damage, misapplication, misuse, negligence, or mechanical condition of vehicle.
- Conditions which impact the appearance of the rubber track but do not render the track unserviceable.

Eligibility

OWNER OR AUTHORIZED AGENT OF THE TRACK OWNER:

- Must present the unserviceable track & copy of the proof of purchase to an authorized track dealership who contacts the proper Trackman authority
- Must completely fill out and sign a Trackman Rubber Track Claim Form supplied by Trackman by Loc to the authorized track dealer
- Accompanied by a clear and visible photograph of the warranty condition that rendered the track unserviceable
- Must pay for taxes, installation or any other additional services ordered at the time of adjustment
- Warranty track must be purchased within 90 days of Trackman approval of the claim

Filing Instructions

All warranty claims must be accompanied by a completed Trackman Rubber Track Claim Form:

- TM number of the track
 - Found embossed on inside wheel path of track and/or molded to the top of several guide/drive lugs
- Tread depth measurement
 - Measure at three points around track with straight edge across two tread lugs directly opposite the center of the roller wheel (average of 3 points)
 - Measure from straight edge bottom to the track carcass 1/2 way between the two lugs
- Date of track purchase
- Date track became unserviceable
- Picture of condition that rendered track unserviceable and machine installed on

Mail or e-mail claim form & picture to:

Trackman
 Attn: Warranty Department
 1115 S. Wayne Street
 St. Marys, Ohio 45885
warranty@trackmantracks.com

Trackman Claim form for: Trackman® Rubber Track Products

Form instructions:
 This form must be completely and correctly filled in by the dealer or the owner, but it must be signed by the owner or his authorized agent, actually using the product before consideration will be given to the claim.
 Include photos of the track area after indicating the reason for the unserviceability claim and a photo of the "tm" number. Mail completed information to: American Rheinmetall - Attn: Track Warranty Administrator - 1115 S. Wayne Street - St. Marys, OH 45885 or email the above information to: Warranty@TrackmanTracks.com.

Dealer claim # _____
 Invoice # _____
 Date _____

Owner's last name (please print) _____ First name _____ MI _____
 Street _____
 City _____ State _____ ZIP code _____
 Owner's telephone number - including area code _____
 Name of employee preparing claim form _____
 Dealer's telephone # - including area code _____
 Dealer's fax # - including area code _____
 Track application (please mark "X") Agricultural Scraper

I/WE hereby certify the statement of facts herein to be correct. I further certify that the only claim arising from the used merchandise described in this claim is for replacement of the merchandise and that no personal injuries, property damage or other loss is involved.

X _____
 Owner or Agent's signature
 Date track purchased (track must be held 30 days after claim is submitted) _____
 Date of track failure _____

Machine year	Machine serial number	Machine type	Track size and type

Track Part Number	Track Serial #	Tread Depth	Track Position	Track Age	Track Hours	Track AU #
1	TM	/32				AU
2	TM	/32				AU
3	TM	/32				AU
4	TM	/32				AU

Track _____ Describe the track condition: _____
 1 _____
 2 _____
 3 _____
 4 _____

Special Information: _____

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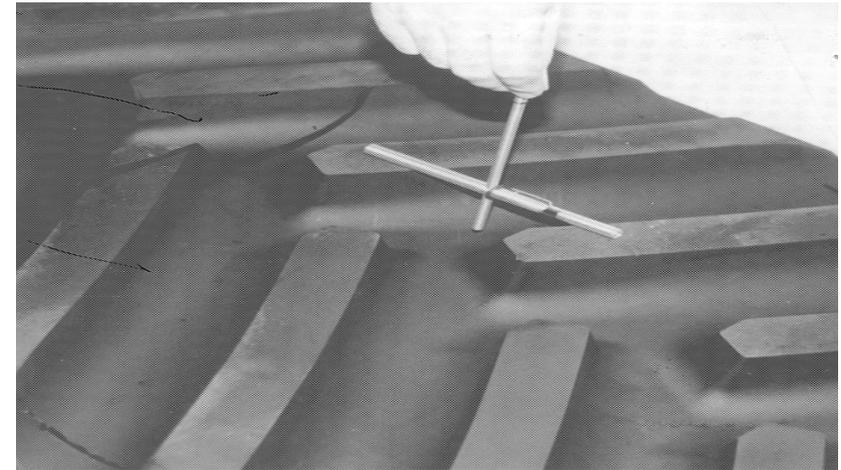
Track Identification Numbers

- **Manufacturer Logo:**
Check the edge of the rubber track for the Trackman logo.
- **Track Manufacture Number:**
Every rubber track will have a unique TM# embossed onto the wheelpath, and on the tops of several guide/drive lugs.
Example: TM138604
- **Track Serial Number:**
Every track will have a serial number or AU number embossed inside the track wheel path.
Example: AU611342914



Measuring Tread Wear

- We recommend the use of a straight edge to bridge between the tread lugs, as shown below.
- Tread depth should be measured from track carcass at the midpoint between the tread lugs to the bottom of the straight edge.
- Tread depth should be on the section of track directly opposite of the roller wheel path.
- Tread depth gauges are manufactured by Haltec or Eaton/Dill or any straight edge or measured rule calibrated in 32nds will suffice.



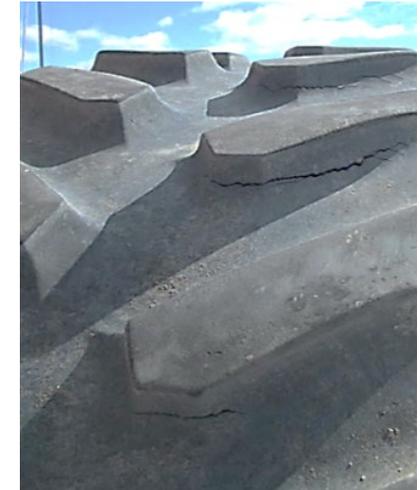
Uneven Tread Wear

- Non Warrantable Condition
- Discussion: Uneven or irregular tread wear is prominent in track systems which have higher weights per unit footprint, such as tracked row crop tractors/implements. Also, any undercarriage arrangement or road/ground condition which concentrates the loading unevenly onto a narrow section of a wider track can also cause uneven tread wear.
- Action: The following best practices are recommended to help reduce uneven/irregular tread wear:
 - Minimize amount of roading
 - Avoid roading with added vertical loads
 - Avoid crowned roads
 - Reduce roading speeds
 - Use wide wheels and tracks whenever possible



Tread Lug Cracking

- Possible Warranty Condition
- Discussion: Tread lug cracking is normally aesthetic and will not hinder the performance of the track. The molded tread lug will likely remain intact and solidly attached to the carcass. Cracking may occur over time, and can occur due to rubber fatigue after extended usage. This fatigue is caused by repeated flexing and bending loads as the track rotates around the wheels. In addition, cracks may form due to tread bar stresses incurred during heavy traction and contact with rougher ground conditions. Cracks are usually shallow, and only at the base of the tread bar. In very few cases will tread lug cracking have an effect on track serviceability duration
- Action: Monitor and report for further evaluation. Submit a claim especially if a tread lug separates from the carcass.



Claim Conditions Review - Tread Lug Chipping/Cracking

- Non Warranty Condition
- Discussion- Tread lug chipping/chunking is usually caused by dense soil clods and/or abrasive soil conditions with possible sand, gravel or rocky materials. Many times the driving surface can be hard and abrasive with possible sharp objects in the path. Rock-laden soils pose the greatest harm to track tread lugs. Crop stubble will cause tread lug chipping
- Action- Avoid running in damaging soil condition. Avoid high slippage drawbar applications. Use normal industry methods to avoid/reduce exposure to crop stubble (i.e. stalk stomper attachments)



Claim Conditions Review - Tread Lug Bulging/Blow Out

- Non-Warrantable Condition
- Discussion- Tread lug bulging/blow-out is caused by roading at high speeds, for long durations, under heavy loads. Heating of the lugs can also be influenced by high ambient temperatures and uneven road surfaces. Internal lug rubber, once overheated, loses physical properties, and lessens the track's ability to resist general wear and tear.
- Action- The following best practices are recommended to help reduce tread heating damage:
 - Minimize amount of roading
 - Avoid roading with added vertical loads
 - Avoid crowned roads
 - Reduce roading speeds
 - Use wide wheels and tracks whenever possible



In order to avoid track damage due to overheating, Trackman recommends that customer follows vehicle manufacture operator instructions.

Claim Conditions Review - Tread Lug Delamination

- Possible Warrantable Condition
- Discussion- This condition is associated with a peeling of thin layer/s of material from the parent tread lug material. The severity of the peeling can vary. Generally, the condition will appear early and will subside, rather than grow worse, as track is used and tread wears normally. This is considered an aesthetic condition and would not be expected to affect the performance or the service life of the track.
- Action- Submit a claim. The degree of wear and serviceability of the track will determine claim disposition. Minor delamination does not affect the tread lug life or performance as much as it being an aesthetic issue.



Claim Conditions Review - Accelerated Tread Wear

- Non Warrantable Condition
- Discussion- Rate of tread wear is influenced by many factors. Most notable influences are soil abrasiveness, soil condition (packed, loose, etc.), amount of slippage, and amount of roading. The roading wear rate can be 10 greater than the field wear rate. Fast tread wear is more common in the industry for row crop applications (i.e. heavily loaded narrow undercarriages).
- Action- The following best practices are recommended to help reduce the rate of tread wear:
 - Minimize amount of roading
 - Avoid roading with added vertical loads
 - Avoid crowned roads
 - Reduce roading speeds
 - Use wide wheels and tracks whenever possible



Claim Conditions Review - Stubble Damage

- Non-Warrantable Condition
- Discussion- Rate of tread wear is influenced by many factors. Crop, plant, stalk and leaf hardness all can play a role in accelerated tread bar and carcass damage. Damage may appear concentrated along a narrow path in row crop applications, or may be seen across entire tread surface.
- Action- The following best practices are recommended to help reduce the rate of tread wear:
 - Use of Stalk Stomper and/or shield device to push down stalks, crop, plant before tracks hit the crop.
 - Operate vehicle in direction bias to rows of stalks



Claim Conditions Review - Tread Lug Loss

➤ Possible Warrantable Condition

➤ Discussion- It is extremely rare that an outside tread lug would be separated on a Trackman Track because of the fully molded construction. The first thing to look for is contact with the tractors implements or any field hazards. Even with a crack in the tread lug, the molded rubber integrated with the base carcass forms a bonded connection that does not separate.

➤ Action- Submit a claim for review.



Claim Conditions Review - Wild Wire

- Non-Warrantable Condition
- Discussion- The rare occurrence of thin single strands of wire working their way out of the track surface. Self repair and removal of the exposed wire is recommended.
- Action- Snip the loose wire at the surface of the track. Note that some wires may continue to extrude; however, condition should subside over time. It is highly unlikely that this will negatively affect the performance or longevity of the track.



Claim Conditions Review - Carcass Overheating Separation

- Non-Warrantable Condition
- Discussion- Under certain conditions internal track temperatures can rise and result in permanent damage. The main factors that affect track heating are: total weight supported per track, vehicle speed, travel duration, ground/road surface conditions, ground contour, and ambient temperature. Tracks are most susceptible to overheating during roading.
- Severe overheating will cause visual separation. Intermediate overheating will cause permanent physical property degradation w/o visual separation.
- Action- In order to avoid track damage due to overheating, Loc Performance recommends that customer refer to vehicle manufacturers operators' instructions, as well as, any service bulletins regarding same subject matter.



Claim Conditions Review - Cable Breaks

➤ Non Warrantable Condition

➤ Discussion- Cables can be broken during de-tracking or while having debris packed in the undercarriage when the vehicle is partially buried and is attempting to free itself with assistance or under its own power. Also, gradual tears can be initiated when sharp rocks are driven into the track's inner wheel paths. This leads to moisture ingress, corrosion, weakening of individual cable/s and eventual fatigue corrosion failure with occurrences of lateral zipper breaks.

The main tension cable in the track is a single strand of cable helically wound across the width of the track. Spacing between cables is minimized in order to maximize the amount of cable included. When debris causes retraction of undercarriage take-up, along with isolation of a smaller area of the track to carry the full tension load, the track cables can stretch beyond their limit (around 2%), and experience ductile overload breakage.

➤ Action- Track will still be able to provide service with a few broken cables; however, over time, the effected area may grow in size and number of broken cables. The track may lose ability to maintain alignment and the likelihood of a sudden complete breakage failure of the track will increase.



Claim Conditions Review - Cable Exposure

- Possible Warrantable Condition
- Discussion- Condition where one or several whole cables are loose or are visible on the inner wheel path surface of the carcass. If the cable is outboard from the wheels, it is not a structural element.
- Action- Continue to monitor the condition or submit a claim for warranty consideration. Track may still be serviceable with minor exposure in some cases. In such cases the recommended action may be to snip individual exposed cable/s and continue running.



Claim Conditions Review - Wheel Path Damage

- Non-Warrantable Condition
- Discussion- Patches of rubber removed in wheel path. Cuts in wheel path. Rock laden soil ingestion. Build up of material on drive, idler bogie wheels. Excessive vertical loading-weight transfer.
- Action- Continually monitor undercarriage for worn or damaged components. Clean rolling elements of undercarriage.



Claim Conditions Review - Drive Wheel Path Wear

- Non-Warrantable Condition
- Discussion- Condition where the inner wheel path surface of the carcass has experienced some level of smooth uniform wear around the length of the track. The edges of the wear corresponds to the width of the drive wheel. In other cases, wear is due to lockup of roller/idler wheels inside the track.
- APPEARANCE: the wear damage appears in the inside surface of the track by thinning the rubber surface looking like it is grooved or planed off, as opposed to sheet separation. The surface rubber is worn off rather than broke off the inside of the track. The wear is uniform around the track. An idler or roller wheel may also show a flat/worn section or may not be freely turning.
- Action- : Monitor roller wheels for signs of lockup. Always maintain correct track tension. If wheel slippage inside the track occurs, operate in a manner to avoid continuous spinning inside track for an extended time in order to minimize damage. For positive drive systems install drive wheel scrapers to minimize build-up of abrasive material rims of the drive wheel.



Claim Conditions Review - Guide/Drive Lug Chunking/Chipping

- Non Warrantable Condition
- Discussion- Damaged Guide lugs show no signs of workmanship/materials defects. Rather, lugs possibly effected by mechanical damage. Undercarriage components may become unsecured and interfere with the lugs. Pulling heavy loads while turning can wear and weaken the sides of the inner lugs. This can make lugs susceptible to further damage and tear-off. Other possible causes of damage on positive drive lugs may be due to ratcheting or mis-engagement of the track and drive wheel.
- Action-
 - Consult vehicle manufacturer's operation recommendations, especially for Scraper applications
 - Maintain proper track alignment
 - Inspect and replace worn or damaged undercarriage components



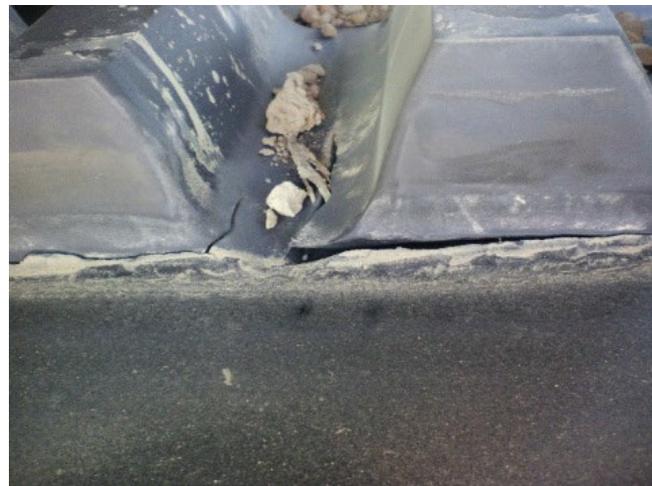
Claim Conditions Review - Guide/Drive Lug Ribbon Ripping

- Possible Warrantable Condition
- Discussion- Condition presents itself as a band/ribbon of consecutive guide/drive lugs separating from the base track (as shown in the accompanying photo). Normally, the ribbon separation occurs as the result of a considerable lateral cable break. This may be considered a warrantable condition if the separation has occurred in the absence of a lateral break.
- Action- Submit a claim for warranty consideration.



Claim Conditions Review - Baseline Guide/Drive Lug Cracking

- Non-Warrantable Condition
- Discussion- Cracking at base of guide/drive lugs. Will vary in severity. May only be cosmetic and not effect track life or performance. Alternatively, may lead to drive lug debond (a warrantable condition).
- Action- Monitor condition. If lug loss appears imminent, or has occurred, exposing a smooth interface surface, proceed to submitting a warranty claim.



Claim Conditions Review - Guide/Drive Lug Debond

- Possible Warrantable Condition
- Discussion- Guide/drive lug separation, exposing a smooth interface between lug and carcass. The key element is “smooth” separation. A smooth separation can be the result of a defect in workmanship or materials.
- Action- Submit a claim for review.



Claim Conditions Review - Side Guide/Drive Lug Wear/Abrasion

- Non-Warrantable Condition
- Discussion- Abnormal guide/drive lugs worn/abraded on side/s of lug. Smooth or chunky appearance. Turning under heavy load. Wheels with sharp edges or worn rubber may promote wear. Continuous hillside work will increase side wear
- Action- Rotate tracks side to side as appropriate. Inspect drive, idler and bogie wheels for worn rubber or sharp edges. Replace if necessary. . Minimize turns under heavy drawbar loads. Maintain proper track alignment using inboard to outboard temperature comparisons per vehicle manufacturer's operator's manual instructions.



Claim Conditions Review - ARMORLUG® Wear

- Non-Warrantable Condition
- Discussion- ARMORLUG® material has wear resistance greater than rubber however the frictive forces applied continuously against ARMORLUG will cause wear and fraying. This can generate a less than attractive appearance until the frayed ends are worn away and the contacting surfaces become parent rubber substrate. Fortunately, the reinforcement is sacrificial in the common wear areas (upper guiding surfaces and driving/reversing surfaces). In the important high stress areas, where the sides of the lugs meet the wheel path, ARMORLUG works to prevent cracking and eventual tear off. Because the ARMORLUG wear is only temporarily cosmetically unappealing and is not reduced in its purpose/effectiveness there is no expectation of reduced performance or track life.
- Action- Customer should take care to make sure tracks are pre-conditioned per vehicle manufacturer's instructions. Also, proper alignment will limit ARMORLUG wear.



Claim Conditions Review - Drive Lug Engagement Wear/Abrasion

- Non-Warrantable Condition
- Discussion- Abnormal wear on front or rear surface of drive lug. Foreign material build up on positive drive wheel. Incorrect or excessively worn drive wheel diameter. Drive wheel pocket mud packing or other obstruction.
- Action-Investigate possible foreign material build up on drive wheel, drive wheel pockets, bars or flanges and/or undercarriage components. Install drive wheel scrapers to prevent drive wheel build-up.



Claim Conditions Review - Drive Lug Jumping

- Possible Warrantable Condition
- Discussion- A condition where track and drive wheel become uncoupled repetitively during heavy pull conditions. The track can be seen climbing above the wheel and then slamming back into engagement. This may happen occasionally or repetitively. The action is accompanied by a loud slapping sound. Drive lugs can be permanently damaged in short period of time, further reducing their pulling capability. May begin as a consequence of lugs being separated earlier due to cracking loss, debond or damage.
- Action- Check for drive wheel build-up. Confirm proper track pre-tension and check to see that take-up device is in proper working order. Submit a claim for warranty consideration.



Claim Conditions Review - Ozone Cracking

- Non-Warrantable Condition
- Discussion- Condition of having high concentration of small surface cracks. Normally this occurs in the valley between consecutive guide/drive lugs. Condition is normally aesthetic and will not affect track performance or life. Tracks are serviceable
- Action- Submit warranty claim if it appears that this condition has rendered the track unserviceable. Refer to Periodic storage of tracks recommendations found earlier in this manual.



Claim Conditions Review - Implement / Field Damage

➤ Non-Warrantable Condition

➤ Discussion- Sharp, straight-line cuts across multiple surfaces indicate an outside object may have damaged the surface. Additionally, jagged cuts, chunks that look torn are also key indicators that an object damaged the rubber surface upon impact. Likely sources are rocks, stumps, tractor implements, fence posts etc.

➤ Action- Assess track for serviceability and potential damage to other components, especially on the undercarriage. Check the roller, idler and drive wheels for potential damage as well.



Claim Conditions Review - Additional Damage

- Possible Warrantable Condition
- Discussion- this “catch all” category is for an uncommon issue which occurs in rare instances or may be a new damage that has not been seen before?
- Action- Submit a claim review. If there is any confusion from the end user, always take plenty of pictures from different angles and fill out the warranty claim form to find a suitable solution.



THE TRUSTED SOURCE FOR THE **TOUGHEST TRACK**