

OPERATIONAL GUIDELINES

AGRICULTURAL TRACK-POSITIVE DRIVE



IMPORTANT
Please read before operating your Camso Track.



Camso Key Elements

This brochure discusses track usage on positive drive systems. A positive drive system is a track system that transmits some or all of the tractive force through a drive wheel and into the track through the internal drive lugs and friction drive surface. Proper machine setup and operation are very important to maximize the life of this type of track, drive system, and track system components.

This document covers six topics that are key in maximizing track and track system life in agricultural and construction applications:

- Operator Awareness
- Proper Ballasting
- New Track Break-In
- Work Cycle Considerations
- Prolonging Drive Lug Life
- Blade Operations

By following the recommendations you can reduce unplanned downtime, maximize track life, improve efficiency, and minimize overall operating cost per hour.

Operator Awareness

The positive drive, all rubber track design, allows the machine to operate in normal agricultural applications as well as more severe applications. This capability can be perceived by the operator as being OK to do so. Often, this is not the case. Without proper training and operator awareness, damage to the tracks, undercarriage, and machine can result. A trained operator, capable of recognizing risky conditions, is the most effective way of avoiding problems that will increase operating costs. It is the owner's responsibility to determine if the economics of a given job, application, or operation are favorable. Remember that warranty covers defects in material and workmanship, not mechanical damage or application hazards.

If the machine becomes stuck, the track can be overtensioned from excessive material ingestion. If the tracks are spinning and begin to dig below the surface level, stop immediately. Do not attempt to use the machine under its own power until material is cleared from the under carriage. Refer to the machine operator's manual for appropriate tow instructions. Never attempt to clear excess material by driving the machine. Keep drivewheel lug pockets and surface clear of material. Remove dried or frozen material before driving machine.

New Track Break-In

When installing new track ALWAYS confirm condition of the track undercarriage and tensioning system, particularly idler and midroller condition. Loose or worn undercarriage components can cause track misalignment that does not respond to alignment adjustments after track installation. New tracks may require more than one alignment adjustment during the break-in phase.

High speed roading increases tread wear rates and builds excessive heat which can reduce drive lug and treadbar life. Roading should be avoided prior to the completion of the break-in phase, particularly on asphalt roads. If road travel is necessary with new tracks, then reduce speed and use a dry lubricant such as oil-dry at frequent intervals.

Always expose new tracks to dry and dusty soil conditions as soon as possible. During break-in, check alignment frequently and make small adjustments as required until alignment stabilizes. Continue to monitor alignment as part of your daily maintenance schedule, as undercarriage wear can change the alignment during the life of the track.

Use Drive Wheel Scrapers

Material build-up on drive wheels can occur in all applications, but is more frequent in damp soil (clay or sand) or sticky crop/plant residue. Drive wheel scrapers must be installed and adjusted correctly to minimize build-up on the drive wheel. Drive wheel material build-up will cause drive lug and track wheel path carcass damage.

Prolonging Drive Lug Life

Drive lug failure is the primary reason for premature track replacement. Drive lug failures are typically caused by mechanical damage, sideloading and excessive torque. Side loading is caused by misalignment and/or side loads during turns. Over torque can occur during low speed/high torque operation. To minimize drive lug damage caused by mechanical damage or misalignment, frequently inspect and clean out any debris in the undercarriage. As part of your regularly daily maintenance, check both sides of the drive lugs for evidence of misalignment. If noted, then alignment adjustments should be made as soon as possible. If misalignment persists, inspect the track system and repair immediately, as loose or worn components may exist. To minimize drive lug damage from dynamic loads, proper operation is critical.

- **Avoid damaging side loads during abrupt high speed turns with heavy drawbar loads, especially on declines and sidehills with heavy towed implements.**
- **Always pull or push the load in a straight line, and avoid operating on side slopes. Raise the implement when turning and avoid loading or pushing material while turning.**
- **Alternate turn or work direction in the field. This will equalize wear on both sides of the drive lugs.**

4 track systems benefit from track rotation front to rear and/or side to side. This will help distribute drive lug and treadbar wear and maximize overall track service life.

Proper Ballasting

Do not exceed machine manufacturer's specifications for maximum machine ballasted weight and overall gross weight which includes the vertical loading on the hitch and mounted attachments.

Static weight distribution on 4 track machines is important for optimized tractor performance and undercarriage and track life. See the tractor's operator's manual for specific details on proper machine ballasting guidelines.

Machines ballasted correctly for field operation are not typically ballasted optimally for road operation. During roading, the additional weight and speed can increase track temperatures thereby accelerating tread wear. To maximize track life, reduce roading speed during prolonged use.

Do not exceed manufacturer's recommended implement for the particular machine model.

Work Cycle Considerations

If machine is approved for scraper applications, operators should maintain a speed of 4-8 mph when loading scrapers. This speed guideline reduces driveline peak torque and will prolong the life of the driveline and powertrain. Most tractor scrapers are designed for self loading, which is best done using shallow cuts and moderate speeds. Slower than recommended loading can increase slip and overload the drivetrain, while faster than recommended loading speeds can increase dynamic loads on the track system.

If equipped, always use front and rear differential lock(s) while under heavy draft load to better distribute the drive torque to all 4 tracks. Always disengage the differential lock(s) when turning or roading. Avoid side loads such as operating on steep side slopes, turning under heavy draft load, or sharp and sudden turns.

Blade Operations

When operating with machines equipped with a blade, avoid excessive slipping or spinning of the tracks. Do not let the tracks spin and dig below the material surface level or excessive material can flow into the idler and midroller wheel path area. This material can “bridge” between the wheels and track causing a track overtension condition. Overtension will damage the track main cables and can result in a torn track, and may also cause untracking and alignment problems due to damaged undercarriage components.

When pushing loose material, position blade to avoid excessive loose berm material from cascading into the undercarriage system. Again, excessive material ingestion will accelerate track and undercarriage component damage.

Always angling the blade the same direction can put side loads on drive lugs causing them to wear only on one side. Alternate blade angle if possible.

For further information on care, operation, and maintenance of Camso Track, refer to the OEM operations manual, consult with your dealer, or search the track machine manufacturer's web site for publications available regarding rubber track machine operation and usage.

Additional information may also be found at camso.co.

camso.co



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