

COMMON UNDERCARRIAGE QUESTIONS, SOLUTIONS AND TIPS

LARRY LUGS -

Have Larry Lugs been tested for reliability?

Absolutely, We have several thousand hours of testing on all sized CAT/ASV small compact loaders in a variety of terrains. These lugs are also sold to many Caterpillar and ASV dealerships worldwide.

Will the bolts pull through the tracks?

The double laminated Kevlar belt is design is very durable. During testing, we have found that in extreme cases the bolt may break before the Kevlar belts will tear and bolts pull through.

Does drilling the holes in the tracks weaken them?

No. The process of bolting on Larry Lugs actually makes the laminate stronger as they pull the multi layers of rubber and Kevlar together to prevent delamination. In some cases of delamination, tracks can be saved and continued to be used by replacing the lugs. These tracks would have otherwise just been trashed.

Will the head of the bolts scratch the concrete, asphalt or other susceptible surfaces?

No. The bolts are button head screw type which are buried into the rubber tread.

How long do Larry Lugs last?

Larry Lugs will most likely outlive the life of the track itself and are reusable. When the life of a track is done, simply remove all the Larry Lugs and reinstall on another track.

How difficult are Larry Lugs to install?

Larry Lugs are simple to install and do not require any special tools. Lugs can be installed out in the field or shop in under 10 minutes. The track does not need to be removed but can be to install numerous lugs at one time. Please refer to the lug install directions on this website.

How many lugs should I replace at one time?

This is totally up to you. If you identify the first lug missing and the adjacent lugs are still in good shape, just replace the broken one. If all lugs are in bad condition, you can replace them all which will guarantee no more downtime due to drive lug problems.. If they occurs, monitor the rest of your undercarriage's condition such as the wear of the rear idler wheels to make sure nothing else is causing the lug failure.

How long will the Track Drill Template and Bair's Carbide Grinding Wheel last?

The steel template will last for years as long as the pre-drilled holes have not been "over" drilled or "wallowed out". The carbide grinding wheel is the best product we have found on the market and should last over a year depending upon standard usage if it is not used on other surfaces other than the rubber tracks.

Could the track tension cause the rubber drive lugs to fail?

That could be a possibility, but with Bair Product's Hydraulic Track Tensioner, you can keep your track's tightness adjusted correctly in the field or shop by simply using a grease gun.

HELP REDUCE THE DRIVE LUG'S WEAR-OUT RATE

One reason that lugs brake off is from extreme wearing of the rear idler wheels. Models such as CAT 247/257 and ASV 50/60 when new, the clearance between the lug and frame is quite close. As the rubber on the rear idler loses it's diameter due to wear, the lug will strike the frame. The operator will not feel or hear this as the wear rate slowly continues. Our solid, aluminum alloy wheels have helped solved this problem.

EXTREME TRACK WEAR

Extreme wearing on the inside and outside of the track is caused at the contact area where the idler and bogie wheels contact the track's inner surface as all the machine's weight is applied at this area. This wear is common with rubber track type equipment of all manufacturers.

One possible solution when possible, is to reduce spinning the track on all surfaces. All the machine's weight are on the idlers and bogies, this contact area has the most load force. Remember the track is flexible.

Another solution as the plastic wheels wear, they lose the flat, contact area. They will wear and take upon the look of a bicycle tire, which increases the load force per square inch. Replacing the rubber/plastic wheels with our solid aluminum alloy wheels will greatly reduce this wear because of maintaining this flat contact surface area.

DRIVE ROLLER CHECK

Grab a drive roller by the hand that is not in contact with the track. Cock the roller cross ways, if you see a gap of 3/16th or greater, replacement should be considered.

Why replace? Drive lug failure or drive roller retaining bolt failure could occur. As the drive rollers wear, the space or slot between them create a shock load to the retaining bolt. At high speed travel, the roller slaps the lugs instead of a smooth impact. If you are breaking drive roller retaining bolts, this is a likely cause. In extreme cases of wear, the rollers will become out of time with the lugs also breaking retaining bolts for the drive rollers and drive lugs.

DRIVE CAGE ROLLER REPLACEMENT TIPS

Change the drive roller and/or bolts in about 30 minutes per side or less with two people. Raise one track off the surface 6" or more, open the rear engine door and raise the cab.

Turn the drive roller retaining bolt from 9 to 11 o'clock in reference to the main frame. Remove the nut and tap the bolt towards the body of the machine. Using a marker, draw a circle around the head of the bolt you are preparing to drill the 1 1/8" hole.

Inspect the inner side of the body for wiring or hydraulic lines, if all looks clear, drill a 1/4" hole. Shine a light on the hole from the outside and take another look inside, if there are no clearance problems, drill a 1 1/8" hole. The hard part is now done. Loosen all drive roller bolts and have a helper start the engine and rotate the tracks slowly. Line up the head of the bolt with the hole and slide the bolt back into this hole. Install new rollers and slide the bolt back through. Install nut hand tight. When all is replaced then torque all bolts to the machine's specification.

DRIVE ROLLER OUTER AND INNER FLANGE INSPECTION

Inspect the wear at the inner and outer rings, specifically where the drive roller through bolts are. At the outside edges, the outer ring looks like a pointed star when new, the other tips are round. Wear at this area will appear flat. If worn, more than 50%, the bolts may rip out. One solution without having to remove the track is to take a welder and build up this area about 3/16th thick or back to its original thickness and about 1" on each side of the bolt.

Helpful Hints for common BEARING FAILURES:

CAT 247/257, ASV 50/60

Most people have a mindset that the tighter their track's tension, the better which is not always the case. Keep in mind that the front and rear idlers carry the track tension load and the bearings are small, so be careful not to over tighten the tracks. This may or may not destroy the bearings.

Example for checking out a track's tightness:

Visualize a 200 lbs person bending over and placing two palms at the middle to the track placing approx. 100 lbs of weight. 1" deflection is about right. Also, too much track tension will eventually wear out the Drive Sleeves and segments.

Information for Machines that have three and four wheels per axle on the Caterpillar B and C multi-terrain loader models.

The cross tube that forms the axle housing has one 3/8" pipe plug. The tube is filled with 90 weight oil. The oil seals are notorious for leaking. In an effort to help solve this problem purchase from a hardware store 3/8 x 1/8 steel bushing reducer and remove the plugs. Install the bushing and a straight grease nipple and pump the grease until it purges out the seal. Re-lube every 200 hours or engine oil change.

Directions - Jack up the machine at least 12" above the floor and remove all the track tension. Rotate the track until the pipe plug is accessible and remove and install the bushing with a grease nipple. If you have a helper to idle rotate at idle speed is helpful.

Also buy a piece of pipe 1/8" x 12" long adapter. This is your grease gun hose so you can reach the front and rear idlers. You may need to heat the axle tube around the plug.