

MECHANICAL DEPARTMENT REPORT

August 2019

Back Hoe parts and information.

Back Hoe usage during tie replacement:

The problem we have is the misuse of the back hoe while removing old ties during track work. The user places the back hoe in front of the first tie and pulls it out than pushes the new tie back in. This action is a straight forward and backward action. No problem.

Now the problem:

Instead of moving the back hoe one foot or so to the next tie the user pulls the next tie at a angle for removal and reinsertion. This will continue until the user is forced to move the back hoe over to a straight line and continue with further extraction of additional ties. This action of pulling and pushing ties in and out at an angle puts a considerable strain on the outrigger gland and creates fractures in the gland causing massive oil leaks. The back hoe was designed to work back an forth in a straight line not side to side. The action of moving the bucket to the right or left is for dumping product only.

This leaves us with a few solutions to remedy this problem.

- 1 Replace the ram with a new one. (User responsible)
- 2 Repair the gland. (Which requires the user to remove the old ram and rebuild it.)
- 3 Additional training of users. (Before and after repairs or replacement)

Parts required for repairs to leaking outrigger cylinder.

- 1 complete ram assembly part number G101181 for \$852.00 plus freight amount tbd/
- 2 outrigger gland part number 1543003C1 for \$216.00
- 3 seal kit for gland 4 in bore for \$45.00

This might be cheaper than number 4 below.

- 4 11 five gallon buckets of hydraulic fluid at \$ 60.00 used last year amounts to (do the math)

Bil Jackson