

Case History: Delaminating Drive Rollers Retrofitting A Drive Unit with Bleacherman Drive Wheels

Problem: Drive rollers consist of a metal core with a synthetic covering that may break down and decompose, eventually separating from the core. Drive units lose traction, bleachers no longer open and close properly.

Solution: Replace delaminating drive rollers, with new Bleacherman solid rubber wheels. These one-piece wheels will not delaminate and will maintain the required 50 durometer “softness” to “grip” the floor and provide the traction needed to operate bleachers. Replacing only the defective rollers - and re-using the serviceable components - saves 70-80% of the cost of total replacement.



Synthetic material on drive rollers breaks down, decomposes and delaminates from steel core. The poor condition of wheels affects traction -- bleachers will not open or close properly and may cause damage to the floor.

SITUATION OVERVIEW

The condition of the rollers in a motor drive system are vitally important to the proper operation of telescopic bleachers. Rollers that are too hard may lose traction, spin and damage the floor. Rollers that are too soft may peel off the outer layers and damage the floor.

Over time, we have seen that the synthetic material frequently becomes a soft, pliable - almost liquid - material. This can be peeled off easily during operation, leaving the metal core in contact with the floor. Damage often results.

Replacing old drive rollers with new drive rollers of the same composition is only a temporary fix. The Bleacherman's long-term solution is to replace the drive rollers with a solid drive roller made of a special rubber composition. This material will never break down and peel away. In fact, it is backed by a 20-year warranty.

When replacing drive rollers in a drive unit, Bleacherman replacement drive rollers will “drop in” for easy installation. Plus, our replacement rollers add 6-inches more surface area which contact the floor, providing optimum traction. (Only the critical drive rollers are replaced, all other components are reused, for the most cost-effective solution.) With the retrofitted drive rollers, this drive unit is very similar to our standard Bleacherman drive unit -- using almost the same motor, gear drive, frame, etc.



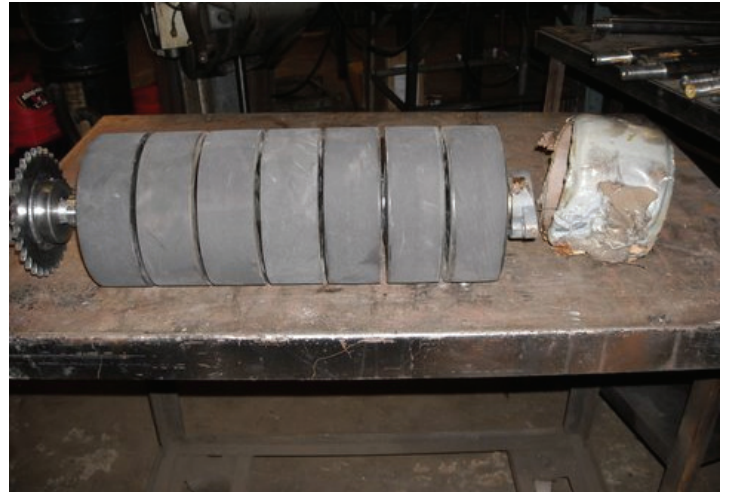
Delaminating drive roller in a drive unit.



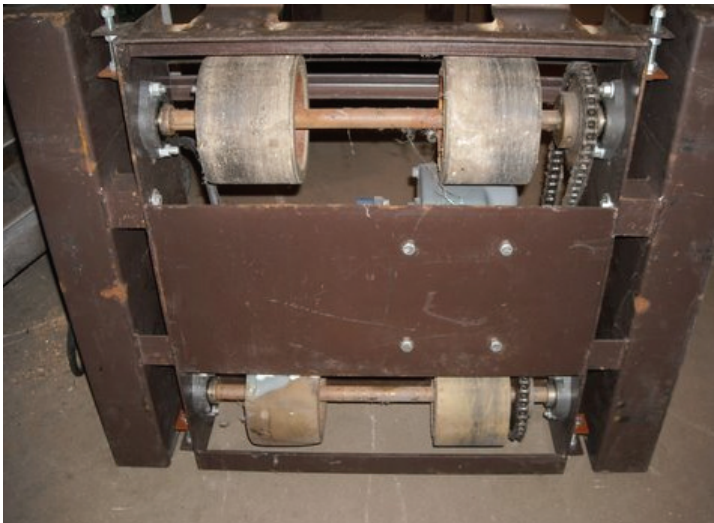
The synthetic covering on these drive rollers are breaking down, and peeling away from the steel drive roller core.



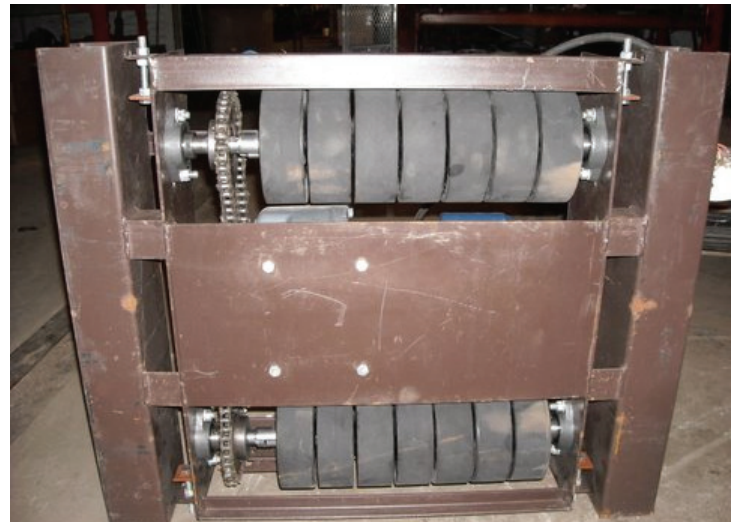
Delaminated drive rollers removed from bleacher drive units. Synthetic covers on steel rollers are decomposing and delaminating.



Bleacherman drive wheels (seen here mounted on shaft) will replace the old, delaminating drive rollers. Components such as drive sprockets, pillow blocks are reused.



Bottom view of drive unit with original 4-inch wide drive rollers.



Same drive unit, now retrofitted with two 14-inch wide Bleacherman drive rollers. Note the additional surface that contacts the floor, for enhanced traction.



Top view of drive unit with original 4-inch drive rollers.



Top view of drive system with Bleacherman drive rollers. All useable components such as frame, motor, gear drive, are reused.