



manufacturers of the finest small elevators since 1986

ELEVATOR CONCEPTS LTD

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HYDRAULIC CYLINDER PACKING WEAR

Hydraulic cylinders supplied by Elevator Concepts LTD utilize a single piece pressure balanced packing, installed in a precision packing bore. There are no adjustments required; consequently, there are no provisions made for adjustment.

The packing is an expendable item, much like tires on a car. The life of the packing will depend on the amount of use, the condition of the plunger, and the quality of the installation. We have seen ranges from 2 to 20 years. The original packing may require replacement in a relatively short time compared to subsequent packings, as this packing burnishes the surface of the plunger. Elevator plungers are finished to a smoothness of about 12 micro inches, and are not plated. The small hydraulic cylinders most people are familiar with are typically finished smoother, and then plated. The additional expense of this degree of finish on an elevator plunger would be prohibitive - it would cost about the same as 5 packing replacements. On an a **typical** Tiger Lift installation, we have seen life expectancy of the packing to be somewhere between 1 and 3 years. On subsequent packings, we have seen between 5 and 10 years.

If you experience premature packing failure after the initial packing replacement, the condition of the plunger needs to be checked carefully before replacing the packing again. The plunger should first be checked with a level to make sure it is still plumb. Then the entire plunger surface should be examined. A simple way to check the plunger surface is to run your hands down the entire length of the plunger wearing new cotton gloves. Most surface problems can be easily detected this way. Most surface roughness can be corrected with fine sandpaper; however, be sure to remove all abrasive residue from the plunger when finished. Large nicks or dents, or large areas of corrosion sometimes require resurfacing with lead or some other filler made expressly for such a purpose. Occasionally, the plunger will have to be replaced, such as when the plunger has been subjected to prolonged exposure to water and is pitted beyond repair.

All hydraulic cylinder examinations and repairs should be performed only by experienced elevator professionals. If you have any questions about this or any other aspect of your elevator, please contact us.