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TECHNICAL

RELEASE

15-R-7

AUTOMATIC TENSIONER KEEPS LOAD BINDER STRAPS TIGHT

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Trucks/Trucking: load securement

February 2015

INTRODUCTION: A challenge with binding down roundwood loads is maintaining constant

tension on the binders, so that the straps do not loosen slightly if the load settles during transport. Our company (4K Truck & Equipment Repair Inc., Broken Bow, Oklahoma) is the dealer and installer for ExTe auto-tensioners on our customers' log trucks. The devices keep the timber bound tightly at all times during transport. This improves safety and efficiency during hauling.

<u>GENERAL</u> FEATURES: The autotensioning device is manufactured by a Swedish company, ExTe Fabriks AB, and the



Fig. 2: Photo shows placement of four tensioner drums and air valves.

OPERATION: The driver uses the manual lever on the tensioner's drum to wind in the strap and tighten the load down to remove any slack. Once all the straps have been tensioned, the driver opens the air valve. This applies tension to the strap and operates the automatic post-tensioning. During the course of driving down a woods road or a highway, as the load moves or settles slightly, the auto-tensioner further tightens the strap and makes sure that the load is always bound tightly.



Fig. 1: Close-up of tensioner/drum. Binder strap is wound into the drum and hangs up when not in use.

device has the trade name Luftman[®]. The Luftman tensioner can be installed either on the outside of the frame or directly on the underside of the log trailer bunk. The function and safety of the tensioner are not impacted by where it is installed. The Luftman tensioner is reliable and has few moving internal parts. The tensioner is easy to service, and the drum can be replaced easily, if necessary. The drum allows for hand-tensioning without tools, and the device uses the normal air supply of the truck to operate.



Fig. 3: Four Luftmans on this trailer—one for each bolster.

When the driver is ready to release the load pressure, he simply releases the lashing from the locking jam and hangs up the hook to restore the strap.



Fig. 4: Passenger-side view. The quick-release locking mechanism is remotely operated and controlled from the driver's side, so the driver does not have to walk around the load while unbinding—a safety advantage!

APPLICATION: At least two truck drivers who operate the Luftman have mentioned that the auto-tensioning devices have saved their lives when they were involved in a wreck. The auto tensioners had the load secured and prevented the logs from crushing the truck cabs. Another driver reported that the stability of his load (bound tightly by the auto tensioners) kept his truck upright and on the road when he had to make an evasive maneuver on the highway.

Log trucks in the Broken Bow, Oklahoma area first started installing the auto

tensioners in 2007. Now about 100 trucks in this area use them. In addition, several of Weyerhaeuser's contract loggers and truckers in the Arkansas/Oklahoma, Mississippi/Louisiana, and Mississippi/Alabama regions are now using the ExTe Luftman devices.

SPECIFICATIONS AND COST: The total weight per Luftman unit, with all hardware, is 19.5 kilograms (42.9 pounds). Customers can rig the trailers to fit their needs best by having 2, 3, or 4 tensioners, depending on the type of wood they haul. The cost for each tensioner is approximately \$1,300.00.¹ It is recommended that only trained installers or certified welders complete the installation work.

To purchase ExTe Luftman tensioners, please contact Keith Mullens at 580-236-1651 (mobile number). More information and a downloadable brochure about the E www.exte.se/eng/pages.asp?r_id=88613.

Reviewed by: Rick Meyer Appalachian/Southwide Region Manager



Fig. 5: Close-up of strap connected to the deployer, which is mounted on the bunk or frame (passenger side).

ExTe Luftman is also available at

Keith Mullens 4K Truck & Equipment Repair Inc. P.O. Box 940 Broken Bow, Oklahoma 74728 <u>k.mullens@tireboss.com</u>

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¹ Price subject to change without notice.