TECHNICAL BULLETIN

ATRO is an ISO 9001 Registered Manufacturer of Geniune Polyurethane Parts for Truck, Bus and Trailer

Evaluation/Replacement of Auxiliary Spring and Spring Shim on Haulmaax™ Suspension

Once bolster springs are installed, the following evaluation should be performed. All measurements should be made on an unloaded truck.

1. Measure height of auxiliary spring. Normal height of unloaded auxiliary spring is 3 3/8". If the height of the unloaded auxiliary spring is 3" or less, the auxiliary spring should be replaced.
2. Inspect the top auxiliary spring shim. If shim is worn more than 1/8", the shim should be replaced.
3. Measure distance between auxiliary spring shim and bottom of auxiliary spring. Gap should not be larger than 3/8".

The following illustrates the importance of conducting the above assessments.

Above is a picture of ATRO load springs (LP50-24179) and OEM Auxiliary Spring which shows the auxiliary spring height is slightly over 2 1/4 ". The height of the spring should be 3 3/8". Per OEM specifications, the spring should be replaced when the spring height is less than 3". This auxiliary spring should be replaced.

Above is a picture of slightly used ATRO load pads (LP50-24179) and ATRO auxiliary spring (LP50-24974). The gap between the spring and top shim plate appears to be good (less than 3/8"), however, the top shim plate is worn completely through. This forces the suspension to lower another 1/4" before the auxiliary contacts the second plate. This shim plate should be replaced.

Both examples above cause the load springs (LP50-24179) to carry the entire load. This produces additional stress on the load pads (LP50-24179).

Note: see OEM's guidelines on back for recommended shims (maximum of 5) per beam.
Also, it is important to inspect the auxiliary spring. A worn auxiliary spring at bolster installation could effect warranty coverage.

ATRO® Engineered Systems

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Evaluation/Replacement of Auxiliary Spring and Spring Shim on Haulmaax™ Suspension

PER OEM, UNLADEN TANDEM WEIGHT WITH BODY/EQUIPMENT INSTALLED*

APPLICATION	10,000-18,000 lbs	18,001-23,000 lbs	23,001-28,000 lbs
Dump Truck	STD-3 Shims	2 Shims	2 Shims
Refuse Front Load Dump	STD-3 Shims	5 Shims	5 Shims
Refuse Front Load Eject	STD-3 Shims	2 Shims	No Shims
Refuse Rear Load Eject	STD-3 Shims	2 Shims	No Shims
Refuse Side Loader	STD-3 Shims	2 Shims	No Shims
Refuse Side Loader Dump	STD-3 Shims	5 Shims	5 Shims
Refuse Recycler Dump	STD-3 Shims	5 Shims	5 Shims
Refuse Recycler Eject	STD-3 Shims	2 Shims	No Shims
Transit Mixer	STD-3 Shims	STD-3 Shims	STD-3 Shims
Crane Truck Mounted	STD-3 Shims	5 Shims	5 Shims

* Matrix based on OEM extensive field testing under varying conditions.

see OEM Literature Number: 17730-244 May 2002 revision A for detailed information

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