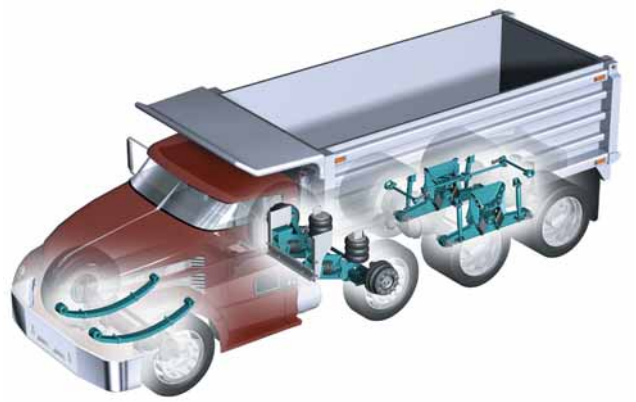


truck tech tips

Volume I, Issue 1 August 2002

CHECK IT OUT

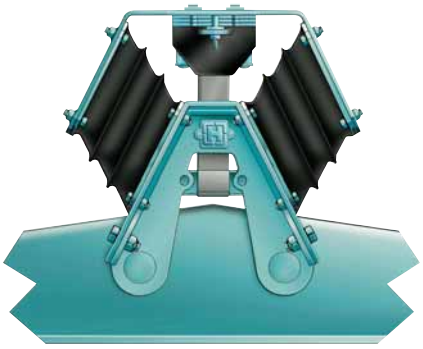
The HN 402/462 suspension was designed to reduce the need for scheduled maintenance found in more traditional mechanical suspensions.

The rubber bolster springs, equalizing beam end bushings, and the elimination of the beam's center bushing contributes to the HN's low maintenance requirements. Due to the infrequent need to inspect the suspension it is important to remember the following items.

Hendrickson suggests *a minimum* of one annual inspection to ensure proper operation and long service life.

The inspection procedure is quite easy. Raise the rear of the vehicle to unload the suspension, and look at all the major components for any premature wear.

The four solid rubber bolsters operate in both shear and compression. As the bolsters compress they become progressively stiffer, providing excellent ride



and stability throughout the empty and loaded condition. The rubber portions of the bolster spring is bonded to steel rate plates. The bolster should be inspected periodically for rubber delamination from the steel plates. Limited delamination or separation is normal. However, if the separation is greater than the established tolerances or criteria they should be replaced.

It is easy to check. Simply use a six-inch machinists scale and measure the depth of separation. If the separation is less than 1½" in depth, the bolster spring is still functional and does not require replacement.

Refer to Hendrickson Technical Publication **17730-227**.

Remember: Check It Out

If It's Not Square — Beware

Total vehicle alignment is paramount to ensure proper tire life. All of the axles on the vehicle need to be perpendicular to the centerline of the chassis, and parallel to each other. Axles that are not properly aligned can reduce tire life by as much as 50%.

Vehicles equipped with equalizer beam style suspensions directly connect the forward and rear drive axles together. Hendrickson has realized the need for easy alignment capabilities on walking beam suspensions. We developed the Bar Pin style end bushings, that allow for proper alignment of the drive axles. These bushings are equipped with specially designed shims.

Removing and rotating the shims moves the axles fore and aft for proper alignment. Spending the extra few minutes and doing proper maintenance could save you money down the road.

Refer to Hendrickson Technical Publication **17730-213**.

Remember: Keep it square and reduce premature tire wear

WE HAVE GOT TO GET TO THE BOTTOM

Walking beams equipped with bronze center and spring eye bushings, found in RT/RTE/RS/R model suspensions, need proper lubrication to achieve longer life.

The loads, which are carried by these bushings, are primarily concentrated on the bottom half of the bushing. This is the area where the grease will help prevent premature wear.
So … how do I get the grease to the bottom? Lift the rear of the vehicle to remove the load from the suspension. Grease, like any other "liquid" material, will always seek the path of least resistance.

By removing the load from the bushings, you help ensure proper lubrication reaches the entire diameter.

Visually inspect the entire diameter of the bushing to ensure that the grease has purged.

While you are looking at the equalizer beam center bushing, take notice of the thrust washers located between the beam and the saddle legs. Original factory installations may only have one

thrust washer on each side of the beam center hub. We recommend that additional washers be installed until the gap is less than the thickness of one washer ($^1/_8$"). This will help maintain good service life, and prevent side shift of the equalizer beam in the saddle.

Refer to Hendrickson Technical Publication **17730-190**.

Remember:
Get the grease to the bottom of the bushings, and you will increase service life.

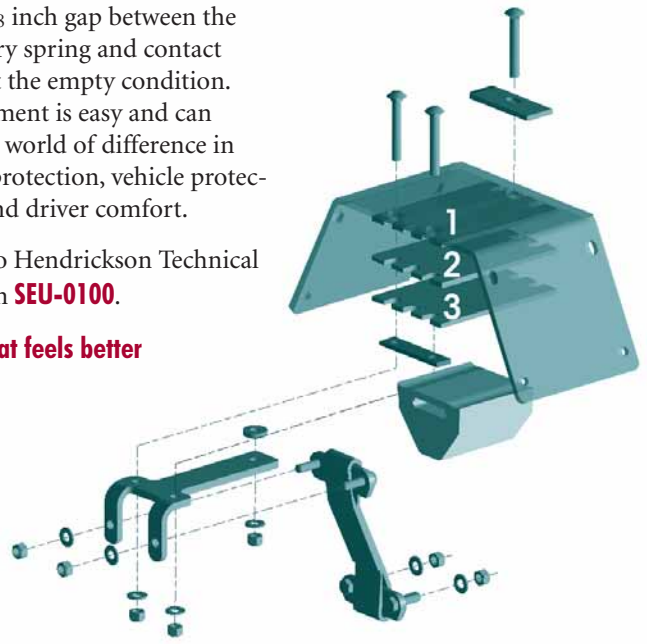
NOW THAT FEELS BETTER

One of the important benefits sought during the purchase of a truck or suspension is ride quality. Traditional mechanical suspension arrangements provide good ride quality at their rated load. However, the unloaded ride can be less than satisfactory. This is why Hendrickson created the HN suspension. Not only does the suspension deliver good ride quality throughout the loaded and unloaded range, it can be adjusted for vehicle application, body weight variations or personal preference.

The unloaded ride of the HN suspension is adjustable with the use of shims located above the auxiliary spring. The auxiliary spring is the wedge shaped spring located between the saddle and the top of the equalizer beam at the center of the suspension. The recommended adjustment is to maintain a $^1/_2 - {}^5/_8$ inch gap between the auxiliary spring and contact plate at the empty condition. Adjustment is easy and can make a world of difference in cargo protection, vehicle protection, and driver comfort.

Refer to Hendrickson Technical Bulletin **SEU-0100**.

Now that feels better



HENDRICKSON
Genuine Parts

There's only one way to ensure the suspension's original performance — ask for Hendrickson genuine parts by name.

Technical Publications

The following publications are available by contacting Hendrickson Tech Service at 630.910.2800 or visit our website at www.hendrickson-intl.com.

- 17730-227
- 17730-213
- 17730-190
- SEU-0100

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