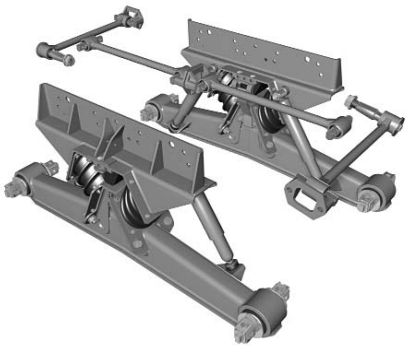


# TECHNICAL BULLETIN

## HN® 402/462/522

**SUBJECT:** Auxiliary Spring Shim Design
**LIT NO:** SEU-0100
**DATE:** June 2006 **REVISION:** C

## IMPORTANT NOTICE

Effective November 3, 2000 an improved auxiliary spring assembly with a new shim design was introduced for production for the HN® 402/462/522.

**The new design:**

- Addresses the importance of matching ride quality and stability for vocational applications. Ride quality is subject to many influences in heavy-duty applications. They include, but are not limited to: body equipment, rear suspension, cab suspension, terrain, chassis/frame specifications, tires/wheels, front suspension, and wheelbase.
- Is completely interchangeable with the auxiliary spring system used in new HN402/462/522 suspension systems manufactured between August 1998 and November 2000. Contact Hendrickson Tech Services regarding vehicles equipped with an HN suspension system manufactured prior to August 1998.
- Offers adjustability for a greater level of ride performance and handling.

Production vehicles are to be equipped with the standard production auxiliary spring assembly, (see Figure 2), using a three (3) spacer shim system. A small percentage of select vehicles will require a shim system other than the standard production assembly.

An adjustment matrix on the back of this publication will assist in determining the correct amount of shims that your vehicle may need. The unladen tandem axle weight with the body installed is the primary determining factor for a match to your vehicle and application.

**Figure 1**
Prior Production
Auxiliary Spring Assembly

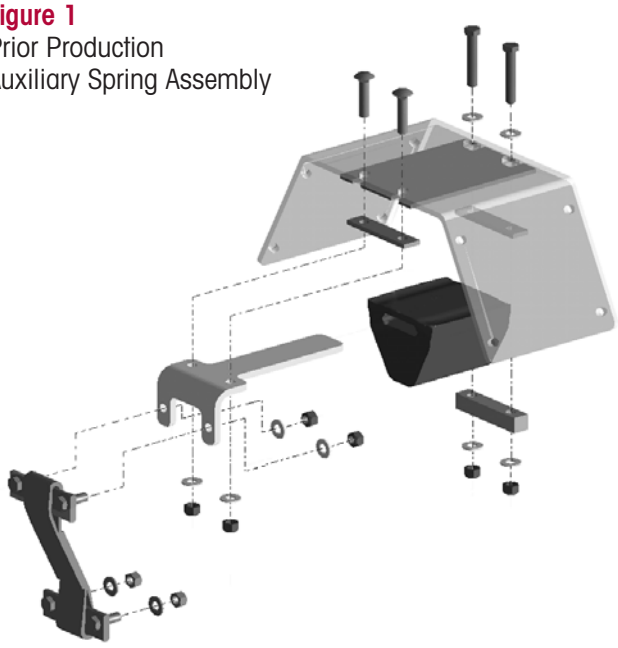
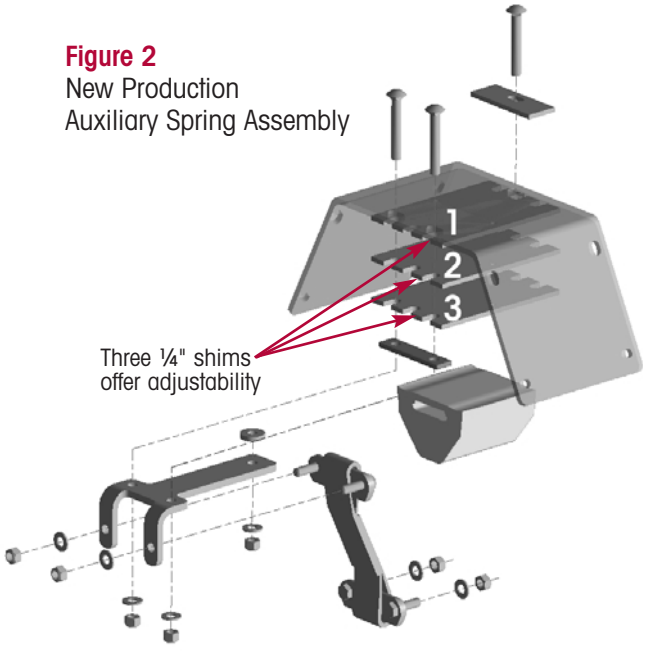


**Figure 2**
New Production
Auxiliary Spring Assembly



## GUIDELINES

The following guidelines are essential in maximizing your suspension performance.

View the matrix below and check if your vehicle falls under one of the following applications and is within the unladen tandem axle weight ranges (with all equipment/truck bodies installed).

1. If so, these applications require optimum ride quality and a very high level of loaded stability. Install or remove shims in order to reach the recommended number of total shims per saddle as stated below.
2. Applications where stability is more important than ride quality, install additional shims onto each saddle to reach the recommended shims (maximum of 5) per saddle.

For additional questions, contact Hendrickson Tech Services at 630.910.2800.

## INSTALLATION

The following instructions are recommended for removal and installation of the shim spacer(s) after determining the proper shims required as per the guidelines listed in this bulletin.

**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 | | 5 Shims | 5 Shims |
| Refuse Front Load Eject | | 2 Shims | No Shims |
| Refuse Rear Load Eject | | | |
| Refuse Side Loader | | | |
| Refuse Side Loader Dump | | 5 Shims | 5 Shims |
| Refuse Recycler Dump | | | |
| Refuse Recycler Eject | | 2 Shims | No Shims |
| Transit Mixer | | STD- 3 Shims | STD- 3 Shims |
| Crane Carrier | | 5 Shims | 5 Shims |

- **IMPORTANT:** Each side of the HN suspension must have an equal number of shims in place.
- Shim Kit Available: Number 58960-001

* Matrix based on extensive field testing under varying conditions.

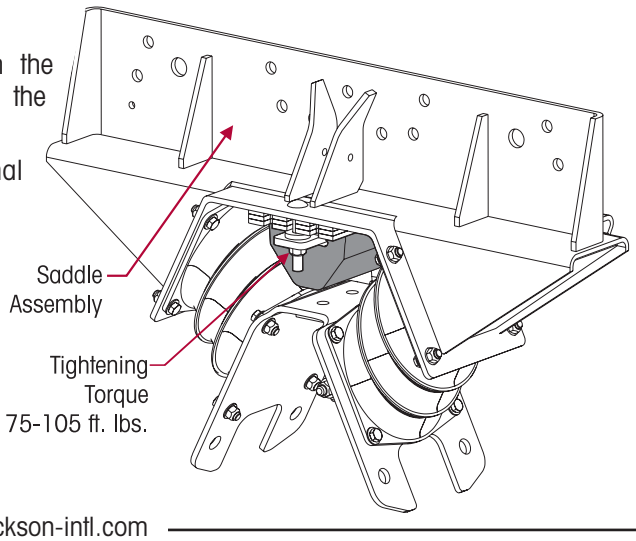
### Disassembly

1. Chock wheels.
2. Loosen the nuts that attach the auxiliary spring assembly to the saddle.
3. Remove or install additional shims as per guidelines.

### Assembly

1. Re-assemble fasteners and tighten locknuts to 75-105 foot pounds torque.
2. Remove the wheel chocks.

**Figure 3**

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