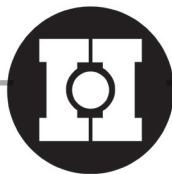




9600/9700

4-Spring Suspension Series

Maintenance Procedures



Hutchens Industries

The Difference is Durability. The Quality is Hutchens.

Springfield, MO ■ (800) 654-8824 ■ (417) 862-5012
Fax (417) 862-2317 ■ www.hutchensindustries.com

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9600/9700 4-Spring Suspension Ser

Warning

We strongly emphasize that the maintenance procedures that we will discuss have a significant safety purpose. Failure to maintain proper torque values on each of the suspension fasteners can result in a failure of suspension components. Further, use of any visibly worn or damaged component can result in a failure. A failure can result in loss of vehicle control and personal injury or death. Safety is the number one concern at Hutchens Industries. We urge you to follow the maintenance procedures set out in our video and in these written instructions.

The first step of a maintenance check is the visual inspection. Walk around the trailer and inspect all suspension components and attachment welds for any problems, such as cracks or unexpected wear. If a component has damage, replace it with a new Genuine Hutch component.

Any threaded connection found to be damaged, rusted, seized or with excessive corrosion that could affect the torque on the fasteners should not be reused. Replace with new Hutch components. Also, if you notice any abnormal tire wear or if the trailer is "off-tracking" this could suggest an alignment issue that may have been the result of inadequate fastener maintenance. Make sure to check all fasteners anytime there is a question about axle alignment.

Review the Hutchens torque decal for the appropriate torque values for each suspension fastener. The lubricated/coated torque values in the first column are for new fasteners with lubricated and coated threads. When you are installing new Hutch components, we recommend you lubricate the threads and use the torque values in this column. For maintenance checks on fasteners that have been in service, use the higher torque values in the dry thread column.

Maintaining the proper torque on the bolts and nuts is necessary to ensure that unintended joint movement that can lead to excessive suspension wear does not occur.

While a visual inspection is critical to identify obvious defects, **you cannot rely on your visual inspection to determine how tight a fastener is.**

Use a torque wrench to check all bolts and nuts to ensure that the recommended torque values are being maintained.

After the first maintenance check, routine visual inspections, torque checks and alignments should be performed at regular intervals throughout the life of the trailer. This is in addition to all federal, state, and industry inspection and maintenance requirements and guidelines.

ANY THREADED CONNECTION FOUND TO BE RUSTED AND SEIZED OR WITH EXCESSIVE CORROSION THAT COULD AFFECT THE TORQUE ON THE FASTENERS SHOULD NOT BE REUSED. REPLACE WITH NEW COMPONENTS.

⚠ WARNING

FOLLOW ALL TORQUE REQUIREMENTS. FAILURE TO PROPERLY TORQUE FASTENERS COULD LEAD TO LOSS OF VEHICLE CONTROL AND RESULT IN SERIOUS INJURY OR DEATH

Install all new fasteners with clean lubricated threads using Lubricated/Coated torque values below. Coated fasteners are considered lubricated. For fasteners that have been in service, use Dry torque values. Check all fasteners regularly to maintain proper torque levels.

Size	Application	Lubricated/Coated	Dry
1 1/8"	Rocker Bolts	590-708 lb-ft	790-948 lb-ft
1"	9700 Radius Rod Bolts	540-648 lb-ft	720-864 lb-ft
7/8"	U-Bolts and 9600 Radius Rod Bolts	350-420 lb-ft	470-564 lb-ft
3/4"	U-Bolts	310-340 lb-ft	420-460 lb-ft
5/8"	Radius Rod Clamp Bolts	130-156 lb-ft	170-204 lb-ft
5/8"	Spring Retainer Bolts	35-42 lb-ft	50-60 lb-ft
5/8"	Pin Cage Bolts	180-216 lb-ft	240-288 lb-ft
1/2"	Hold Down Clip Bolts	65-78 lb-ft	85-102 lb-ft

**Hutchens Industries**

P.O. Box 1427
Springfield, MO 65801-1427
Toll Free 1-800-654-8824

9700/9600 Suspensions and Sliders
Decal P/N 16086-01 Rev K

Hutchens Torque Decal Part No. 16086-01

This decal should be installed on the side of the trailer in a visible location.
Decals can be obtained free of charge by contacting Hutchens Industries, Inc.

ries - Maintenance Procedures

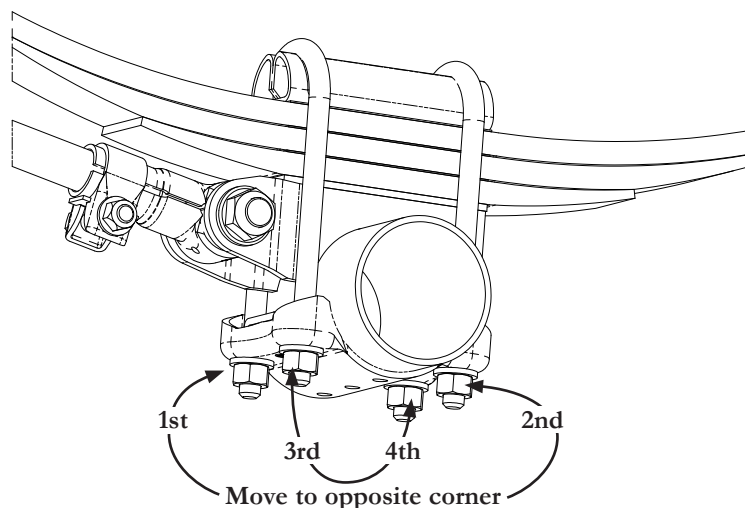
Note: Although a conventional overslung axle configuration is shown, these recommendations apply to ALL axle sizes and configurations. Also, these checks and recommended fastener torques apply to ALL cast and fabricated steel hanger styles and wheel bases.

Now let's look closely at the maintenance requirements for each of the suspension's main component groups.

Axle Clamp Group and Springs

1. Check the torque on the U-bolt nuts by alternately tightening opposing corners of the clamp assembly. **See Fig. 1.**
 - a. When using 7/8" U-bolts, the torque on the nuts should be maintained at a **dry** level of 470 – 564 lb-ft.
 - b. When using 3/4" U-bolts, the torque on the nuts should be maintained at a **dry** level of 420 – 460 lb-ft

Fig. 1



Always carefully examine the spring and axle clamp components for any signs of wear or cracks and replace if visible wear or cracks are present.

Radius Rods

- 2a. If you are working on the 9700 model suspension - The 1" radius rod attachment bolts at the hangers and spring seats should be maintained at a **dry** torque level of 720 – 864 lb-ft. This applies to both the adjustable and non-adjustable radius rods. **See Fig. 2a.**

Fig. 2a

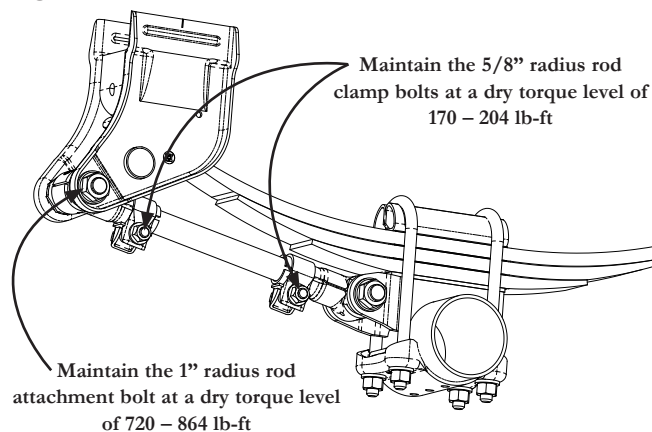
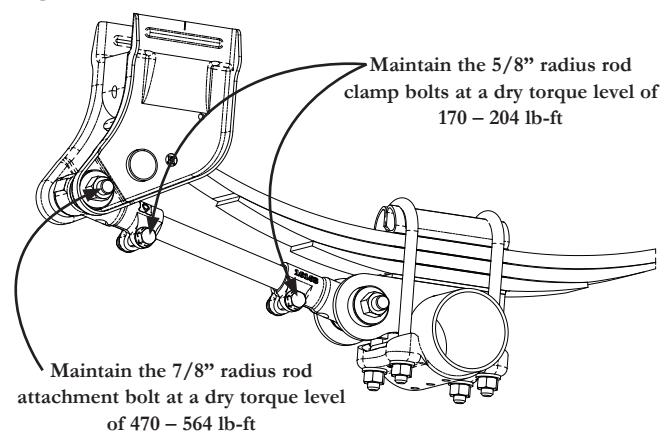


Fig. 2b



- 2b. If you are working on the 9600 model suspension - The 7/8" radius rod attachment bolts at the hangers and spring seats should be maintained at a **dry** torque level of 470–564 lb-ft. **See Fig. 2b.**

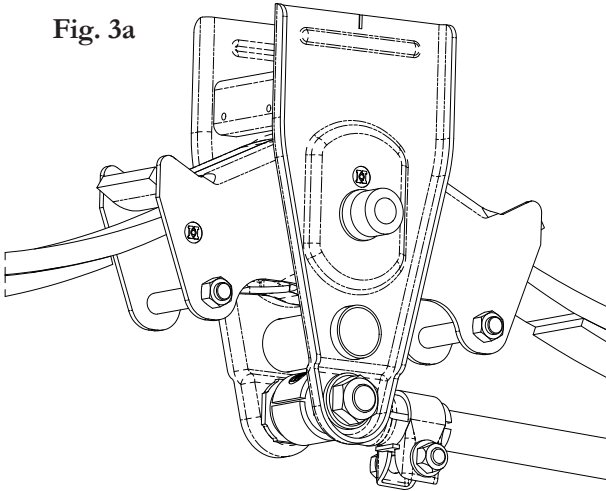
Loose operation of the radius rod bolts can result in wear requiring that new Hutch components be installed to avoid structural damage. During your visual inspection, if you observe any wear or loosening in the bushing, it is imperative that you immediately replace the radius rod bushing and bolt. Failure to replace these components will result in damage to the hanger, spring seat and/or the radius rod.

- 2c. Next check the 5/8" radius rod clamp bolts. These bolts should be maintained at a **dry** level of 170 - 204 lb-ft of torque. **See Figures 2a. and 2b.** If the clamp bolt has not been properly maintained, then wear between the adjustable radius rod screw and the eye end will occur. If so, the entire radius rod must be replaced. **Simply re-tightening the clamp bolt or replacing it will not correct the problem.**

Rocker Bushings

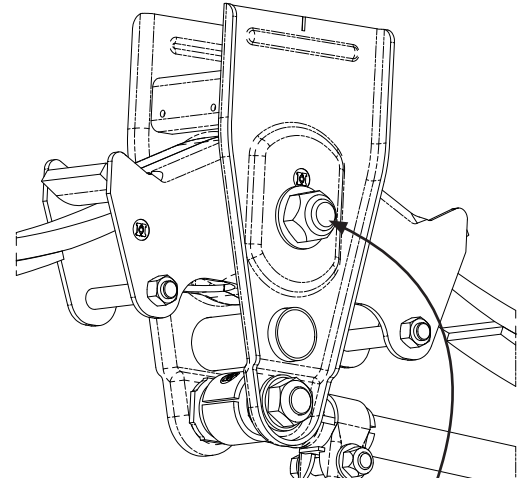
If the center rocker/hanger connections are not installed with the Huck® bolt fasteners, the single 1 1/8" rocker bolt should be maintained at a **dry** level of 790 – 948 lb-ft of torque for both the 9600 and 9700 model suspensions **See Figures 3a. and 3b.**

Fig. 3a



Huck® Bolt
No torque maintenance required

Fig. 3b



Maintain the single 1 1/8" rocker bolt
at a dry torque level of 790 – 948 lb-ft

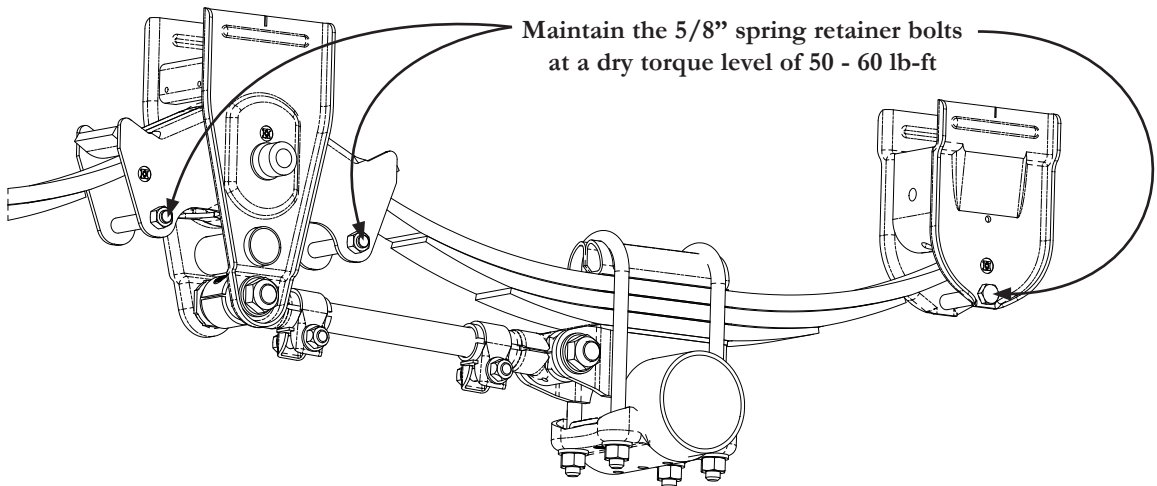
During your check if the Huck® fastener or rocker bolts are loose, a detailed inspection of the rocker is important to ensure that no structural damage has occurred.

Hangers

Finally, check all of the 5/8" spring retainer bolts found in the rockers and rear hangers.

A **dry** torque value of 50 - 60 lb-ft should be maintained on all of these bolts. Be careful not to overtighten the retainer bolts. **See Fig. 4**

Fig. 4



Maintain the 5/8" spring retainer bolts
at a dry torque level of 50 - 60 lb-ft

Remember, loose fasteners that are allowed to operate for any period of time will result in irreversible suspension damage and possible loss of vehicle control. **Simply re-tightening a worn fastener will not correct the situation created by loose operation!** So maintain the proper torque levels and enjoy the long life and dependability of a Hutch suspension.

Following any maintenance procedures or repairs, the trailer's axle alignment should be examined and adjusted to comply with the Truck and Trailer Manufacturers Association (TTMA) Recommended Practice RP No. 71 and The Maintenance Council (TMC) Recommended Practice RP 708D.