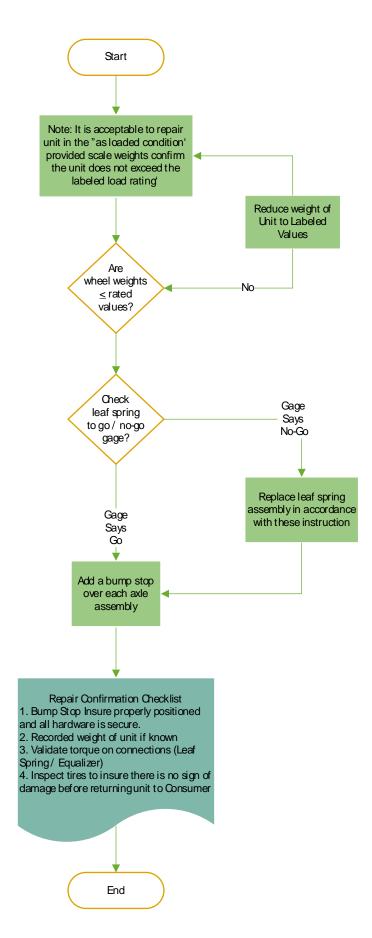
North Point Suspension Inspection & Bump Stop Installation

	<u> </u>		1		Г		
Bulletin Type:		Safety Recall		Publication Date:	July 2020		
Bulletin #:	20V-385 US 2020-302 Canadian			Make:	Jayco		
Job Code:		9901513					
	_	ct Vertical Clearance .2 Hour		Model:	North Point FW		
Flat Rate(s):	RC025 Inspect all 4 leaf springs <u>.5</u> Hour RC026 Replace 4 leaf springs <u>2.5</u> Hour RC028 Install 4 bump stops <u>.7</u> Hour			Model Year:	2017		
Incident:		Inspect North Point Suspension System components for proper load dimensions. If dimensions are out of specification, the leaf springs may require replacement.					
		NOTE: ALL units require installation of four (4) rubber bump stops.					
Affected Units:		ALL 2017 Model Year North Point Fifth Wheels					
Parts Kits: 20V-385A Bump Stop 20V-385B Steel Leaf Spring		20V-385A Bump Stop Kit — 4 per Unit (Quantities shown below are per unit) 4-Bump Stop Assembly Jayco #2000322 8-Hex Bolts 5/16-18 x 5" GR5, Jayco #2000323 8-Washer Flat 5/16, Jayco #0011766 8-Washer Lock Split 5/16, Jayco #0011665 1-Gauge Block Wood 2 ¾" x 2 ¾" x ½" Jayco #2000321 20V-385B Leaf Spring Kit — 4 per Unit (Quantities shown below are per unit) 4-Double eye- 7-leaf spring stacks w bronze bushings, Jayco #2000292 8-U bolts .56-18 x 7.25" Zinc, Jayco #0309179 16-Nut Hex .56-18 GR8 Zinc, Jayco #0309194 (u bolt) 16-Washers, Flat Hardened 9/16, Jayco #0308280 (u bolt) 8-Bolt Shackle (Wet) Shoulder .56 x 3.24", Jayco #0315400 (leaf spring) 8-Nut .44-20 Prevision TQ Zinc, Jayco #0297635 (leaf spring) NOT IN PARTS KIT 4-Leaf Spring tie plates, use component on repair unit					
Misc. Too Supplie		Screw gun 1/2" socket & ratchet 1/2" wrench Tape Measure & 28" long steel straight edge Torque Wrench Adjustable (0-50 Ft/lbs.)					



2017 North Point Recall 20V-385 2020-302 Repair Decision Tree

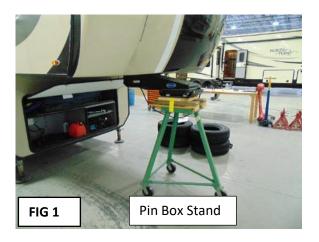
Prepared by: Paul Rine & Tom Delvecchio – July 2,2020

2017 North Point Suspension Recall 20V-385 / 2020-302					
Inspection & Repair Decision Tree					
July 02, 2020					
Dealer Note: - Perform inspections in accordance with recall instructions and record the "as found" inspection results for the leaf					
					found" inspection results for the leaf spring camber. These inspection results will determine which repair kits to order.
Leaf Spring Camber must be $\geq 3 \ 1/2''$ at all locations. Record the <u>as repaired</u> dimensions below					
Forward Rear					
e inspection ODS-F:					
re included ODS-R:					
checking g camber DS-F:					
p 2, Fig 3-5 DS-R:					
Suspension System Notes: - If any one Spring Camber measures less than the 3 ½"- replace all four springs.					

Step 1: INITIAL SETUP OF THE TRAILER

STEP 1:

- Position the unit on a flat level surface.
- Support the unit on the pin box using a suitable stand or a forklift (Fig 1).
- The unit must be in a level condition.
- Retract ALL stabilizer jacks.
- The unit can be in an "as loaded" state, however not to exceed 3500 pounds for any one tire.
- Record tire weights on inspection sheet in the space provided (page 3 of this document)



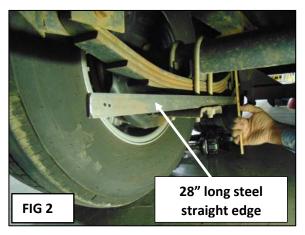
Step 2: INSPECT LIPPERT STEEL LEAF SPRINGS

STEP 2: PARTS KIT 20V-385B MAY BE REQUIRED

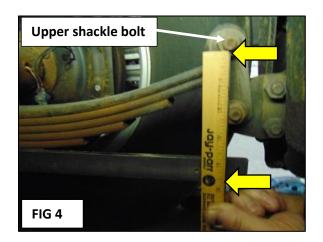
- Count the number of leaves that make up the leaf spring (6 or 7).
- Record this number on the inspection sheet (page 3 of this document). Enter the number under the "AS FOUND" section.

FIG 2:

- Place a 28- inch long steel straight edge so it rests on top of the spring tie plate.
- Steel straight edge needs to be 28 inches long in order to balance on the spring tie plate and extend out to the end of each spring to make measuring easier.



SO



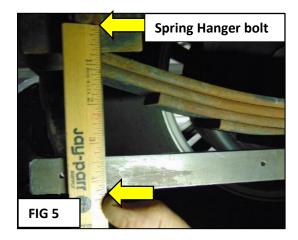


FIG 4:

- Measure the vertical distance between the bottom of the straight edge, and the bottom of the upper shackle bolt threads (located at the equalizer) (between arrows in photo).
- Measure this dimension on ALL springs.
- Record dimensions for all springs on the inspection sheet (page 3 of this document) under "AS FOUND" section.

FIG 5:

- Measure the vertical distance between the bottom of the straight edge, and the bottom of the spring hanger bolt thread section (between arrows in the photo).
- Measure this dimension on ALL springs.
- Record dimensions for all springs on the inspection sheet (page 3 of this document) under "AS FOUND" section.
- These two dimensions will give you the approximate vertical distance from the spring eye to the tie plate. This is how the flatness of the spring under load is determined.
- <u>PASS</u>: If all of the leaf springs measurements were greater than 3-1/2 inches, but the gauge block fails to fit into the space between the axle tube and the hanger tube (Fig 2), in one or more of the 4 axle locations...**GO TO STEP 4.**
- FAIL: If ANY of the leaf springs measurements are less than 3-1/2 inches, ALL (4) leaf springs will need replaced.
 - Remove the 6-leaf spring and replace with a 7-leaf springs in accordance with the instructions from Lippert Components, Inc (the axle manufacturer) found on pages 10 through 19 of these instructions.

Repair inspection - After ALL leaf springs are replaced you will need to recheck the clearance between the axle tube and the hanger tube (Fig 2), using the SAME gauge block provided in the kit.

- PASS: Recheck spacing using the gauge block and if it now fits between the axle tube and the hanger tube (in all 4-locations), record results in the "As-Repaired section of the inspection sheet (page 3 of this document), THEN PROCEED TO STEP 5.
- FAIL: If after replacing the springs, the gauge block fails to fit between the axle tube and the hanger tube in any or the 4 locations, THEN PROCEED TO STEP 4.

Step 3 INSTALLATION OF RUBBER BUMP STOPS (4 TOTAL)

STEP 3: PARTS KIT 20V-385A IS REQUIRED ON ALL UNITS

• Install the rubber bump stops ONLY if the gauge block has successfully fit into the space between the axle tube and the hanger tube behind each wheel, FOUR (4) locations. Reference (Fig 2).



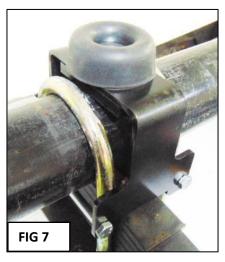
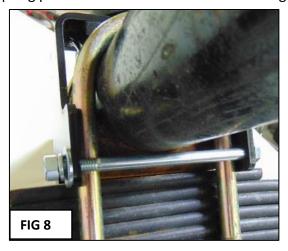


FIG 6:

- Bump Stops (4 per unit).
- Mounting hardware for one bump stop: two 5/16-18 x 5" Gr5 hex bolts, two 5/16 Gr5 flat washers, two 5/16 Gr5 lock washers, and two 5/16-18 Gr5 hex nuts.

FIG 7:

- Position the bump stop over the top of the axle between the spring hanger U-bolts.
- Spring pack will fit in the notches on each leg of the bump stop bracket.



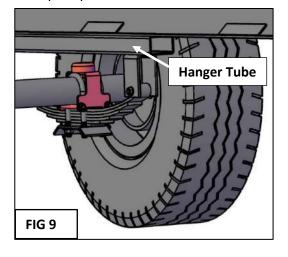


FIG 8:

- Install two 5/16-18 hex bolts through the holes in the bump stop bracket.
- Place a flat washer, lock washer and nut on each of the bolts.
- Torque to 10-12 Ft/lbs. (nuts should be tightened together)

FIG 9:

- Completed bump stop for one axle location.
- Repeat installation process at all three (3) remaining wheel locations.

REFERENCE SECTION: SUGGESTED TOOL LIST FOR CHANGING THE STEEL LEAF SPRINGS



- 1. The photo above shows the following tools:
- 2. ½ inch drive Adjustable Torque wrench (zero 50 Ft/lbs.) (not shown)
- 3. ½ inch ratchet
- 4. 3/8 inch ratchet with 16mm socket
- 5. Punch (approximately 3/8" diameter)
- 6. Small Sledge hammer
- 7. 28" long steel straight edge
- 8. Impact driver with following ½" drive impact sockets: 11/16, 13/16, 14mm, 15mm, 17mm, 19mm
- 9. Screw gun with 6" long 3/8" nut-setter bit (or standard 3/8" nut-setter bit with 6" bit extension)
- 10. Drill with a 3/16" drill bit
- 11. Tape Measure
- 12. Mechanics Creeper
- 13. Grease Gun with a tube of Wheel bearing grease Jayco part # 0230435
- 14. Lippert Manuals:
- 15. Wet Bolt Installation (part # ccd-0002018)
- 16. Axle and Suspension Installation (part # ccd-0001412)
- 17. Trailer Axle Owner Manual 2K-7K

REFERENCE SECTION: PHOTOGRAPHS FOR STEEL LEAF SPRING KIT & RUBBER BUMP STOP KIT



RUBBER BUMP STOP 20V-385A Required on ALL Units



STEEL LEAF SPRINGS 20V-385B
Required based upon inspection results

Jayco's sole obligation under our limited warranty is to repair or replace defective materials and/or workmanship deemed our responsibility as determined by Jayco in our sole discretion. Jayco reserves the right to use new and/or remanufactured parts or materials of similar quality to complete any work, and to make parts and/or design changes as appropriate without notice to anyone. Jayco designs and/or materials changes are done without obligation to incorporate such changes in previously manufactured product. Jayco makes every reasonable effort to ensure field remedies will not adversely affect performance and/or safety of the unit. This field remedy is not intended to extend to future performance of this RV, or any of its materials, components or parts beyond the standard warranty period. The RV owner's obligation to notify Jayco, or one of its independent, authorized dealers, of a claimed defect does not modify any obligation placed on the RV owner to contact Jayco directly when attempting to pursue remedies under state or federal law. Jan. 2019.

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Section II: STEEL LEAF SPRING REPLACEMENT



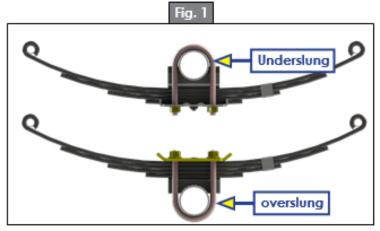
LEAF SPRING REPLACEMENT ON AN EXISTING AXLE BEAM



AXLES AND SUSPENSION

Purpose

This document outlines the process for replacing the double-eye leaf spring components on an existing axle beam assembly. The following procedure is applicable for both underslung—when the leaf spring is mounted, or "slung", under the axle—and overslung—when the leaf spring is mounted, or "slung", over the axle (Fig. 1).



NoTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

AWARNING

The trailer MUST be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death, serious personal injury, severe product and/or property damage.

AWARNING

Always lift the trailer by its frame and never by its axle or suspension. Axle and suspension components are not designed, or rated, for the dead weight, point-of-contact loads that the trailer's frame is. Do not go under the railer unless it is supported by appropriately rated jackstands. Improperly supported trailers can collapse, causing possible serious personal injury or death.

ACAUTION

Moving parts can pinch, cut or crush. Keep clear and use caution.

A CAUTION

Wearappropriate personal protective equipment (PPE) when performing service or maintenance operations. Always wear eye protection when servicing trailer axles, brakes, hubs, springs and wheels. Not using PPE may result in personal injury.

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AXLES AND SUSPENSION

Resources Required

- 1 2 persons, depending on task
- Floor jacks
- Jack stands
- · Pneumatic air or impactgun

- · Assorted deep well sockets
- · Hammer or mallet
- · Torque wrench (ft-lb)

Replacement Procedure

- Using floor jacks, lift the frame slightly and place properly-rated jack stands under the axles (Fig. 2) so
 the shackle bolts can be driven out with a hammer.
- Place a suitable block under the axle tube near the area to be repaired.

NoTE: The block acts as a support for the weight of the axle only, allowing suspended system components to be serviced or replaced freely. Multiple axle trailers **MUST** have the weight of each axle properly supported before disassembly of any suspension system components.

Fig. 2



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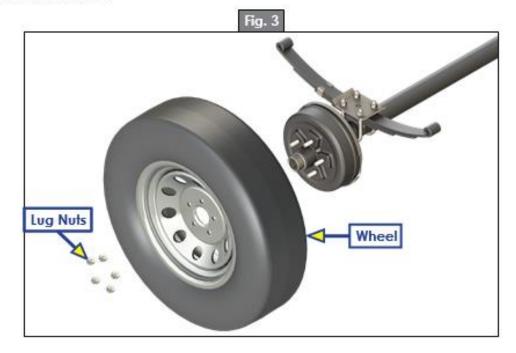




AXLES AND SUSPENSION

- Remove tires and wheels—curbside and roadside—from the axle (Fig. 3) with the affected leaf spring.
- 4. Set wheel and lug nuts (Fig. 3) aside for laterinstallation.
- Inspect axle/brake assembly electrical wiring and/or hydraulic hoses for length. If lines are too short to allow lowering the axle, disconnect lines before lowering.

NoTE: Make sure electrical power is off and hydraulic system has been de-energized before disconnecting lines.



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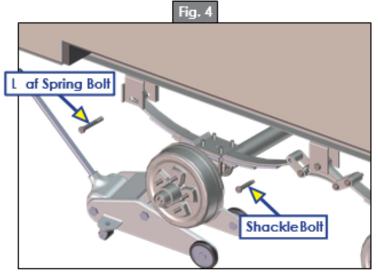




AXLES AND SUSPENSION

 With an impact gun or an appropriate wrench, loosen the nuts on the leaf spring bolts and the shackle bolts (Fig. 4).

NoTE: Hold the head of the bolts with a wrench.



- Remove the nuts from the leaf spring bolts and the shackle bolts.
- 8. Drive out the leaf spring bolts with a mallet or hammer until they unseat from their hanger.
 - A. Inspect the threaded end of the bolts for damage to the threads.
 - B. If threads are damaged, replace bolts. Otherwise, set bolts and nuts aside for later installation.
- Drive out the shackle (wet) bolts of the shackle link assemblies with a mallet or hammer until they unseat from their leaf spring and equalizer.
 - A. Inspect the threaded end of the shackle (wet) bolts for damage to the threads.
 - B. If threads are damaged on one or both bolts, replace shackle link assembly. Otherwise, set shackle link assemblies, shackle links and nuts aside for later installation.

NoTE: At this point in the installation, LCI recommends inspecting the equalizer shackle links. If the shackle links are worn, LCI recommends replacing them.

NoTE: Shackle links MUST be reinstalled using the same shackle orientation used previously.

- Adjust the floor jacks so the jack stands can be removed from under the axle.
- 11. Using the floor jacks, lower the axle of the leaf spring being replaced.

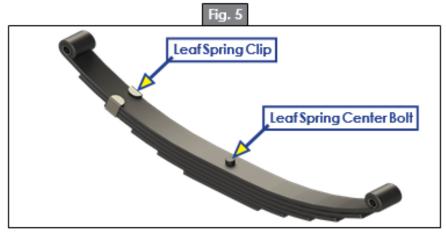
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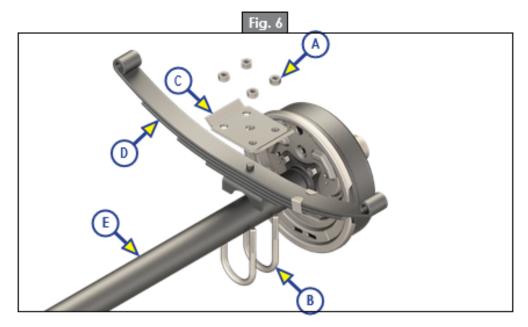


AXLES AND SUSPENSION

12. Position and orient the new leaf spring (Fig. 5) underneath the trailer to help expedite installation.



- 13. After the axle and leaf springs have been lowered from the chassis hangers and shackle links:
 - A. Remove U-bolt nuts (Fig. 6A) from the affected leaf spring.
 - B. Remove U-bolts (Fig. 6B) and tie (spring) plate (Fig. 6C) from the axle (Fig. 6E) holding the affected leaf spring (Fig. 6D).



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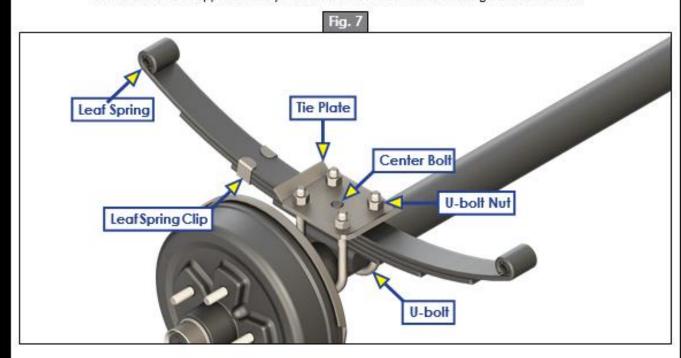
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AXLES AND SUSPENSION

- C. Set U-bolts, nuts and tie (spring) plate aside for later installation.
- D. Set removed leaf spring aside. Do NoT reuse affected leaf spring.
- 14. Place the new leaf spring (Fig. 6) onto the axle with the leaf spring clip pointing towards the front of the trailer. Make sure spring center bolt engages the center hole of the tie (spring) plate.
- 15. Position U-bolts and tie (spring) plate on the axle (Fig. 7).
 - A. Install washers, if equipped, and hand-start nuts.
 - B. Hand-tighten nuts until snug (Fig. 7).
 - C. Verify the following:
 - I. Center bolt is engaged in tie (spring) plate (Fig. 7).
 - II. Leaf spring is square to the axle (Fig. 7).
 - III. U-bolts are straight up and down and not splayed in or out.
 - IV. U-bolts have approximately the same amount of thread sticking out of each nut.



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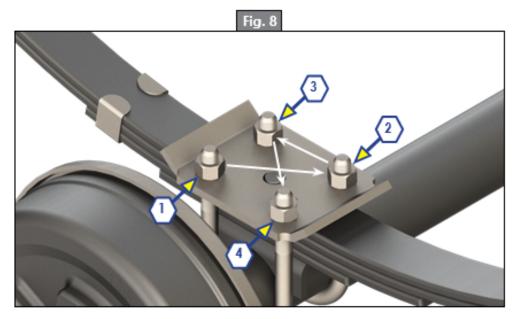
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AXLES AND SUSPENSION

 Progressively tighten tie (spring) plate nuts in a criss-cross pattern, in the order given (Fig. 8), until the final torque is obtained. Refer to Spring Axle Torque Specifications chart for bolt torque requirements.



Spring Axle Torque Specifications							
Bolt Type	Axle Capacity	Torque					
3/8" U-Bolt Nuts	2K	35 ft-lbs					
1/2" U-Bolt Nuts	3.5K	50 ft-lbs					
9/16" U-Bolt Nuts	5.2K	65 ft-lbs					
9/16" U-Bolt Nuts	6-8K	90 ft-lbs					
Spring Eye, Equalizer and Shackle Nuts	All Double Eye	30-50 ft-lbs					

- 17. Verify the following:
 - A. Leaf spring is square to the axle.
 - B. Tie (spring) plate is flat against leaf spring.
 - C. U-bolts are straight.
 - D. U-bolts have approximately the same amount of thread sticking out of each nut.
 - E. All nuts are torqued.
- 18. Use floor jacks and jack stands to raise axle assembly into position for reinstallation to the trailer's frame, do as follows:
 - A. Reinstall previously removed leaf spring hanger and shackle bolts and nuts.
 - B. When installing wet bolts, use a steel tube and hammer to drive in wet bolts to prevent damage to the grease fitting.
 - C. Refer to Spring Axle Torque Specifications chart for bolt torque requirements.

NoTE: Hold the head of the bolts with a wrench.

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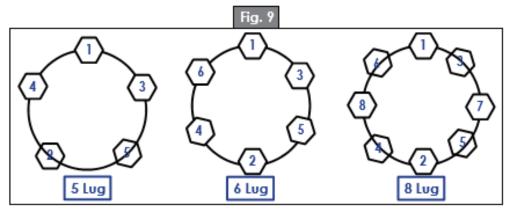


AXLES AND SUSPENSION

- D. If installing new or previously removed wet bolts, apply new grease. Use NLGI code GC-LB.
- E. Reconnect any disconnected electrical lines and/or hydraulic hoses (step 5).

NoTE: If reconnecting hydraulic hoses, make sure all hydraulic lines are purged of air.

- Reinstall previously removed tires, wheels and lug nuts (steps 3 and 4) onto the axle (Fig. 3).
 - Start all wheel lug nuts by hand to prevent cross-threading.
 - B. Continue to hand-tighten wheel lug nuts in the sequential pattern shown in figure 9.
 - C. After wheel lug nuts are fully hand-tightened, torque nuts in stages and in the sequential pattern shown in figure 9.



D. Torque wheel lug nuts to the torque values listed in the Wheel Torque Requirement Chart.

Wheel Torque Requirement Chart								
Wheel Size	Stud Size	Torque Sequence						
WHEEL SIZE	Stud Size	1st Stage	2nd Stage	3rd Stage				
14"	1/2"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs				
15"	1/2"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs				
16"	1/2"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs				
16.5" x 6.75"	1/2"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs				
16"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs				
16.5" x 6.75"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs				
16" Dual and 17.5" Cone Nut	5/8"	50-60 ft-lbs	100-120 ft-lbs	190-210 ft-lbs				
16" Dual and 17.5" Flange Nut	5/8"	50-60 ft-lbs	150-200 ft-lbs	275-325 ft-lbs				
14.5" Demount	1/2"	Tighten sequentially to 85-95 ft-lbs						

The leaf spring replacement procedure is now complete.

As a supplier of components to the RV industry, safety, education and customer satisfaction are our primary concerns. Should you have any questions, please do not hesitate to contact us at (574) 537-8900 or by email at customerservice@lci1.com. Self-help tips, technical documents, product videos and a training class schedule are available at lci1.com or by downloading the MyLCI app.

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WET BOLT INSTALLATION

AXLES AND SUSPENSION

Recommended Tools:

- Alignment Tool- Spud Wrench or Bull Pin or similar
- Floor Jack
- Grease Gun
- Hammer
- Jack Stands
- Pneumatic Impact Gun w/ 7/16" Impact Socket

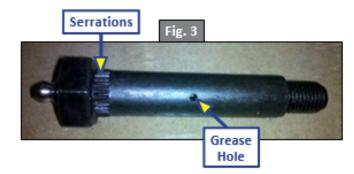
Reference TI-083 for standard chassis blocking

- Using jack stands to support chassis, support axle for safe disassembly of axle bolts and hardware. After removing axle bolts, inspect spring eyes for brass bushings. Change if needed by using the following procedure:
 - A. Place brass bushing on an appropriately sized punch. An appropriate sized punch will allow the bushing to slip onto the shaft, but not slide off the other end.
 - B. Insert end of punch into spring eye.
 - C. Drive old bushing out with hammer.
 - As the old bushing is driven out, the new bushing will be inserted into the spring eye.
 - E. The new bushing should be seated as shown (See Fig. 1).
- Replace standard mounting hardware, one at a time, with wet bolts and 7/16" locking flange nuts (See Fig. 2). Insert the wet bolts with the grease zerks on the inside of the spring hangers into the axle mounting holes as shown (See Figs. 4 & 5). The serrations under the head of the wet bolt should be fully inserted into the brass bushing.





NOTE: Grease hole should be positioned at 3 or 9 o'clock. If the grease holes are not installed properly, the weight of the chassis will prevent the grease from fully lubricating the brass bushings (See Fig. 3 for location of grease hole).



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WET BOLT INSTALLATION



AXLES AND SUSPENSION





- Tighten locking flange nuts to shoulders of wet bolts. If the serrations under the head of the wet bolt are not fully inserted into the brass bushing, carefully tap the wet bolt into position with a rubber mallet or similar tool. Care should be taken not to damage the grease zerks.
- Apply enough grease to fully lubricate the brass bushing. Typically, two squirts from a manual grease gun are sufficient.
- 5. Reconnect electric brakes, if applicable.
- Remount wheels.

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