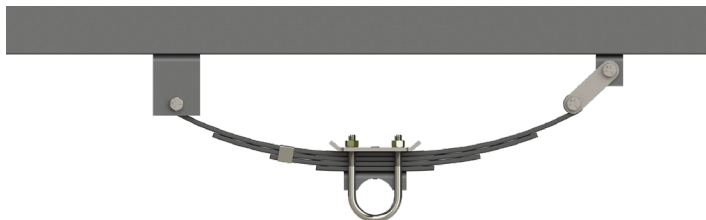
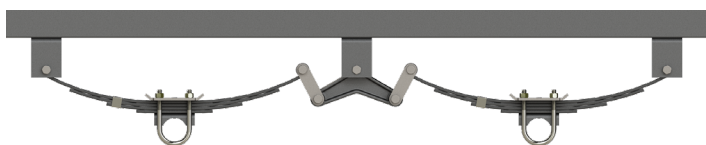




Single Axle A/P Kit



Tandem Axle A/P Kit



Triple Axle A/P Kit



**NOTE:** Cover images are representations of the Attaching Parts Kits for varying number of axles on a trailer.

# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual

(For Aftermarket Applications)

## Table of Contents

Introduction .....	2
Safety .....	2
Parts List .....	3
Resources Required .....	5
Prior to Installation .....	5
Installation .....	6
A/P Kit Single, Tandem or Triple Installation Tips .....	6
Single Axle A/P Kit .....	6
Tandem and Triple Axle A/P Kits .....	6
Wet Bolt A/P Kit Installation .....	7
Maintenance .....	8
Notes .....	8

### Attaching Parts Kits for Axles Aftermarket Kits

Part #	Description
<a href="#">121101</a>	Single Axle AP Kit, 3 1/8" Link
<a href="#">121097</a>	Tandem AP Kit, 33" Axle Spacing, EQ-104
<a href="#">121098</a>	Tandem AP Kit, 33" Axle Spacing, EQ-310
<a href="#">121099</a>	Tandem AP Kit, 35" Axle Spacing, EQ-E1
126359	Tandem AP Kit, Heavy Duty, EQ-104 (OBSOLETE)
<a href="#">121100</a>	Triple AP Kit, 33" Axle Spacing, EQ-104, EQ-105
126452	Triple AP Kit, Heavy Duty, EQ-104, EQ-105 (OBSOLETE)



# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual (For Aftermarket Applications)

## Introduction

The Attaching Parts Kits for axle suspensions are designed for easy upgrading or replacing old suspension systems.

**NOTE:** Upgrade or replacement of suspension systems may be performed on an overslung (Fig.1A) or underslung (Fig.1B) axle configurations.

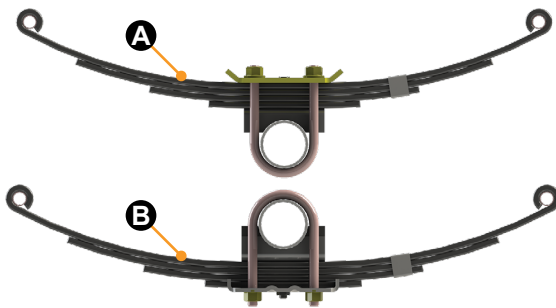


Fig.1

**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.

Additional information about this product can be obtained from [lci1.com/support](http://lci1.com/support) or by using the myLCI app. Replacement kits can be ordered from <https://store.lci1.com/> or by using the myLCI app.

The myLCI app is available for free on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

iTunes®, iPhone®, and iPad® are registered trademarks of Apple Inc. Google Play™ and Android™ are trademarks of Google Inc

Information regarding the assembly and components of this product can be obtained from <https://support.lci1.com/ap-kits>.

## Safety

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

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions.

This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

### **⚠ WARNING**

THE "WARNING" SYMBOL ABOVE IS A SIGN THAT A SAFETY RISK IS INVOLVED AND MAY CAUSE DEATH, SERIOUS PERSONAL INJURY AND/OR SEVERE PRODUCT OR PROPERTY DAMAGE IF NOT SAFELY ADHERED TO AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL.

### **⚠ WARNING**

FAILURE TO FOLLOW INSTRUCTIONS PROVIDED IN THIS MANUAL MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY AND/OR SEVERE PRODUCT AND PROPERTY DAMAGE, INCLUDING VOIDING OF THE COMPONENT WARRANTY.

### **⚠ WARNING**

THE TRAILER MUST BE SUPPORTED PER MANUFACTURER'S RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

### **⚠ CAUTION**

THE "CAUTION" SYMBOL ABOVE IS A SIGN THAT A SAFETY RISK IS INVOLVED AND MAY CAUSE PERSONAL INJURY AND/OR PRODUCT OR PROPERTY DAMAGE IF NOT SAFELY ADHERED TO AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL

### **⚠ CAUTION**

MOVING PARTS CAN PINCH, CRUSH, OR CUT. KEEP CLEAR AT ALL TIMES.

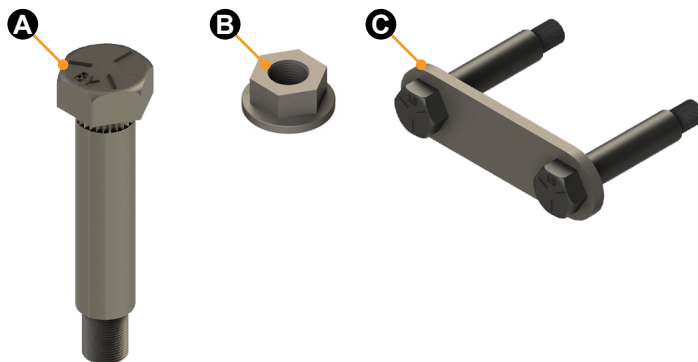
# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual (For Aftermarket Applications)

## Parts List

Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.

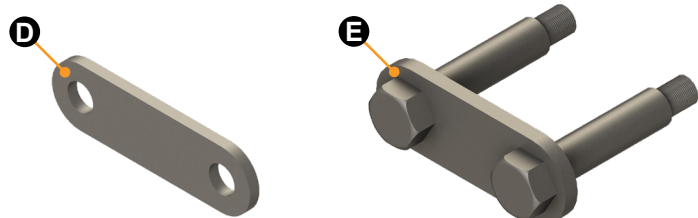
### Single A/P Aftermarket Kit PN 121101

Letter	PN	Description	Qty
A	<a href="#">122102</a>	Bolt, 7/16" - 20 x 2 7/8"; GR5 (.0563 Body Dia.), Black Phos & Oil	2
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	6
C	<a href="#">133485</a>	Shackle Link Assembly, 3.13"	2
D	<a href="#">133207</a>	Shackle Link, 3.13"	2



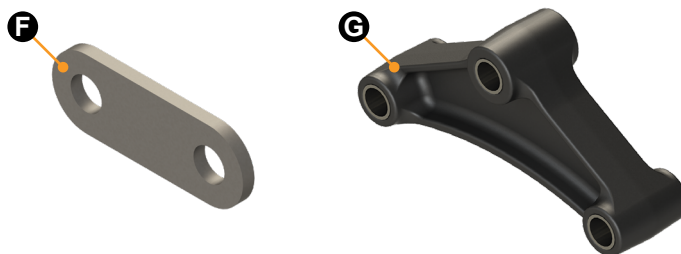
### Tandem Standard A/P Aftermarket Kit PN 121097

Letter	PN	Description	Qty
A	<a href="#">122102</a>	Bolt, 7/16" - 20 x 2 7/8"; GR5 (.0563 Body Dia.), Black Phos & Oil	6
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	14
E	<a href="#">125675</a>	Shackle Link Assembly 2.25"	4
F	<a href="#">122487</a>	Shackle Link, 2.25"	4
G	<a href="#">126460</a>	EQ-104 Assembly w/Nylon Bushing	2



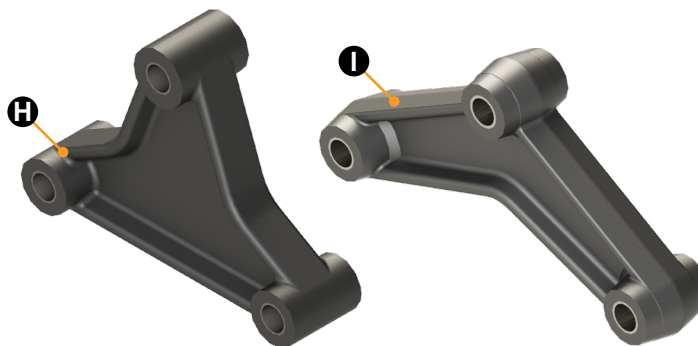
### Tandem Tall A/P Aftermarket Kit PN 121098

Letter	PN	Description	Qty
A	<a href="#">122102</a>	Bolt, 7/16" - 20 x 2 7/8"; GR5 (.563 Body Dia.), Black Phos & Oil	6
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	14
E	<a href="#">125675</a>	Shackle Link Assembly, 2.25"	4
F	<a href="#">122487</a>	Shackle Link, 2.25"	4
H	<a href="#">126741</a>	EQ-310 Assembly w/Nylon Bushing	2



### Tandem Long A/P Aftermarket Kit PN 121099

Letter	PN	Description	Qty
A	<a href="#">122102</a>	Bolt, 7/16" - 20 x 2 7/8"; GR5 (.0563 Body Dia.), Black Phos & Oil	6
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	14
E	<a href="#">125675</a>	Shackle Link Assembly, 2.25"	4
F	<a href="#">122487</a>	Shackle Link, 2.25"	4
I	<a href="#">122106</a>	EQ-E1, Assembly w/Nylon Bushing	2



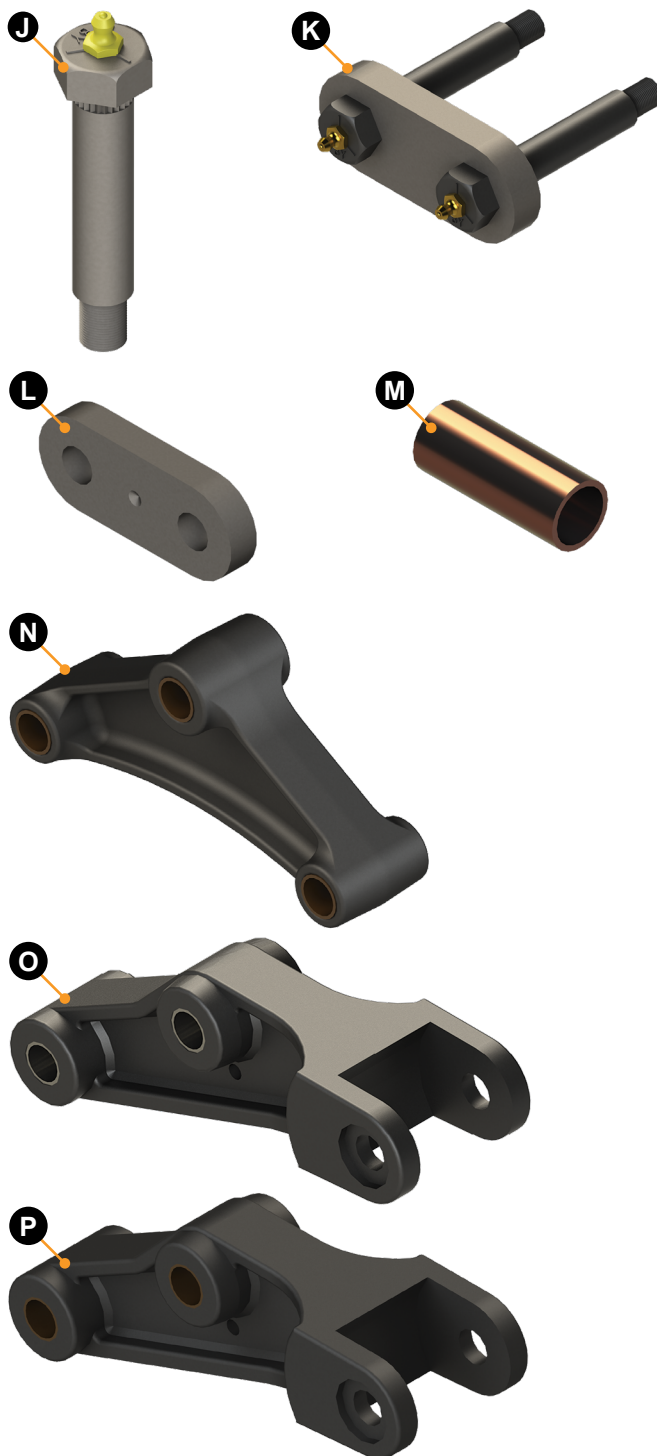
# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual (For Aftermarket Applications)

**NOTE:** Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.

Tandem Heavy Duty A/P Aftermarket Kit PN 126359			
Letter	PN	Description	Qty
J	<a href="#">126238</a>	Wet Bolt, 7/16" - 3.24" x 9/16", Shoulder Bolt	6
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	14
K	<a href="#">126205</a>	HD Shackle Link Assembly, 2.25", Long Grease Bolt	4
L	716204	HD Shackle Link, 3.75" x 1.50"	4
M	<a href="#">126171</a>	RPB Bronze, 1.74 x .70	8
N	126459	EQ-104, Assembly w/Bronze Bushing	2

Triple Standard A/P Aftermarket Kit PN 121100			
Letter	PN	Description	Qty
A	<a href="#">122102</a>	Bolt, 7/16" - 20 x 2 7/8"; GR5 (.0563 Body Dia.), Black Phos & Oil	10
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	22
E	<a href="#">125675</a>	Shackle Link Assembly, 2.25"	6
F	<a href="#">122487</a>	Shackle Link, 2.25"	6
G	<a href="#">126460</a>	EQ-104, Assembly w/Nylon Bushing	2
O	<a href="#">126277</a>	EQ-105, Assembly w/Nylon Bushing	2

Triple Heavy Duty A/P Aftermarket Kit PN 126452			
Letter	PN	Description	Qty
J	<a href="#">126238</a>	Wet Bolt, 3.240 x 9/16", Shoulder Bolt	10
B	<a href="#">122103</a>	Nut, 7/16" - 20 REVLKN ZN GR2 ST	22
K	<a href="#">126205</a>	HD Shackle Link Assembly, 2.25", Long Grease Bolt	6
L	716204	HD Shackle Link, 3.75 x 1.50"	6
M	<a href="#">126171</a>	RPB Bronze, 1.74 x .70	12
N	126459	EQ-104, Assembly w/Bronze Bushing	2
P	126276	EQ-105, Assembly w/Bronze Bushing	2



# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual

(For Aftermarket Applications)

## Resources Required

- 1 to 2 people, depending on task
- Steel tube to install bolts with grease fittings
- Pneumatic impact wrench
- Multi-purpose grease marked with a NLGI code of GC-LB
- Torque wrench (ft-lb)
- Appropriately-sized and rated bolts and fasteners
- Cordless or electric drill or screw gun
- Floor jacks
- Appropriate drive bits
- Floor jack stands
- 1<sup>1</sup>/<sub>16</sub>" deep well socket
- Pry bar (optional)
- 3<sup>4</sup>/<sub>4</sub>" deep well socket
- Hammer
- 13<sup>1</sup>/<sub>16</sub>" deep well socket
- Grease gun

## Prior to Installation

### ⚠ WARNING

MAKE SURE THAT ANY POINTS OF CONTACT FOR THE JACK STANDS DO NOT RESULT IN DAMAGE TO ANY PANELS OR LINES UNDER THE TRAILER. IMPROPER RAISING OR LOWERING OF THE TRAILER COULD RESULT IN DEATH, SERIOUS PERSONAL INJURY OR SEVERE PRODUCT OR PROPERTY DAMAGE.

1. Park the trailer on a level surface.
2. With the trailer still connected to the tow vehicle, lower the front landing gear or the tongue jack until contact with the ground is made.
3. Disconnect all internal and external power supplies.
4. Using the properly-rated floor jacks, lift the trailer according to the manufacturer's recommendation until the wheels are no longer in contact with the ground (Fig.2).

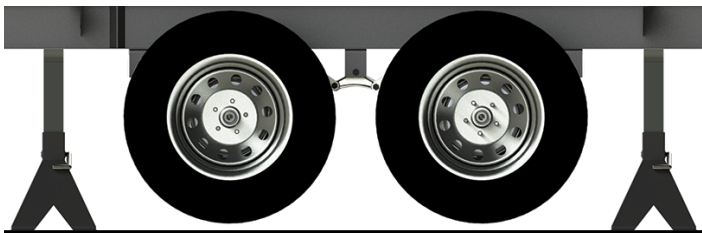


Fig.2

5. Support framework in accordance with the manufacturer's recommendations.

6. Remove the wheels and set aside wheels and lug nuts.
  7. Using a floor jack, lift the axles slightly and place the additional properly-rated jack stands under the axles (Fig.3) so that the shackle bolts can be driven out with a hammer.
- NOTE:** Allowing the axles to drop could result in damage to the wiring for the electric brakes.
8. With an impact wrench or an appropriate wrench, loosen the nuts of the leaf spring hanger bolts (Fig.3A), the nuts on the shackle bolts (Fig.3B), and the nuts on the equalizer bolts (Fig.3C).

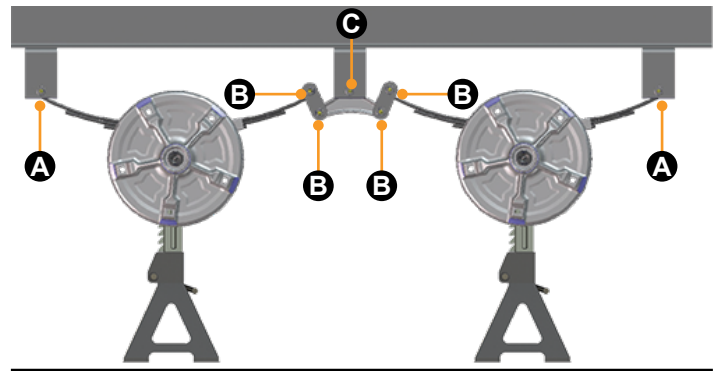


Fig.3

**NOTE:** Hold the head of the bolts with a wrench.

9. Drive out the leaf spring hanger bolts (Fig.3A) and equalizer bolt (Fig.4A) with a hammer, so that the bolts unseat from the hanger. Remove the bolts.
- NOTE:** Pry bar may be used to remove the equalizer bolt. The equalizer should hang freely from the shackle links.
10. The shackle link assembly (Fig.4C) with the shackle bolts (Fig.4B) should be removed from the leaf spring eyelets (Fig.4D).
11. Trailer is ready for installation of the new LCI A/P kit.

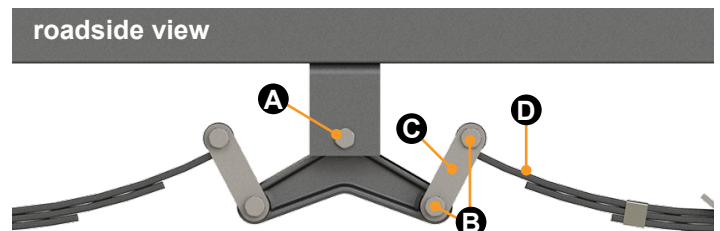


Fig.4



# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual

(For Aftermarket Applications)

## Installation

### ⚠ WARNING

THE TRAILER MUST BE SUPPORTED PER MANUFACTURER'S RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

### A/P Kit Single, Tandem or Triple Installation Tips

It is important that the components are attached to the vehicle frame in the proper manner. Here are some guidelines:

- The nuts should not be used to "pull" the shackle bolt into the hanger. Instead, the bolt should be driven into the hanger using a hammer. This will fully seat the serrations of the bolt into the hanger hole and provide maximum resistance to rotation during service.
- Shackle bolts that are free to rotate will drastically limit the service life of the hangers.
- Over tightening the nuts can lead to fastener failure. The torque specification for the  $\frac{7}{16}$ " - 20 hex locknut used on the shouldered shackle bolts is 30-50 ft-lbs.
- If non-shouldered shackle bolts are being used, tighten the  $\frac{9}{16}$ " - 18 hex locknut only snug against the hanger surface. The axle spring eye must be free to rotate on the bolt for proper suspension articulation and performance.
- Using an impact wrench without holding the other side of the shackle bolt with a wrench can damage the serrations of the shackle bolt.

### Single Axle A/P Kit

1. Insert the shackle link assembly (Fig.5A) through the spring leaf (Fig.5B) and the rear hanger. Attach the shackle link and nuts.
2. Torque the nuts to 30-50 ft-lbs.
3. Insert the hanger leaf spring bolt (Fig.5C) in the front hanger outside plate, through the leaf spring eye and out the backside of the hanger plate.
4. Torque the nut to 30-50 ft-lbs.
5. Reconnect electric brakes, if applicable.
6. Remount wheels.

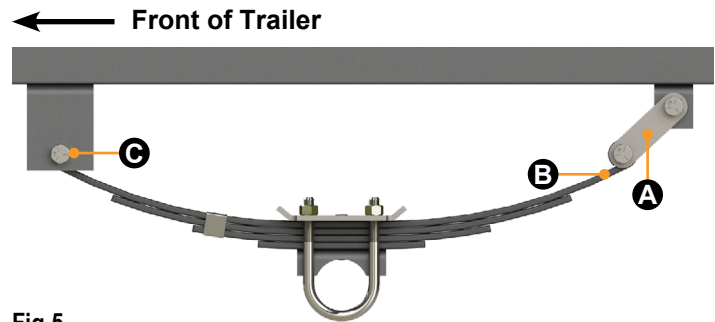


Fig.5

### Tandem and Triple Axle A/P Kits

1. Install the equalizer bolt (Fig.6A) through the equalizer hanger outside plate (Fig.6B), the top most bronze equalizer bushing (Fig.6C), and through the equalizer hanger inside plate (Fig.6D).
2. Use a hammer or a piece of steel tube (for bolts with a grease fitting) and drive the bolt into the equalizer hanger outside plate, until the bolt head (Fig.6A) is seated against the hanger outer plate surface (Fig.6B).

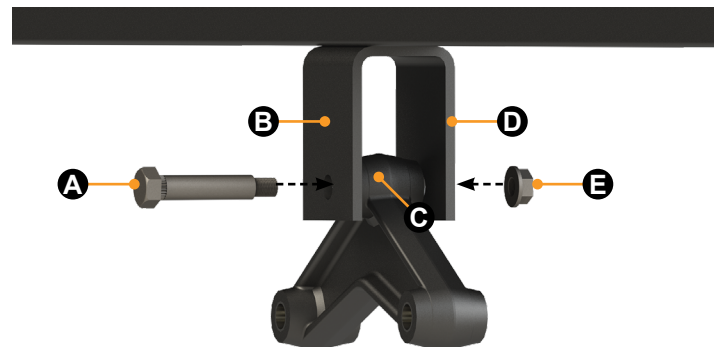


Fig.6

3. Both the shackle bolts and equalizer bolt must be installed from the outside-in towards the center of the trailer chassis. This ensures that the bolt threads do not interfere with any other assemblies. This applies to bolts with or without grease fittings.
4. Thread a nut (Fig.6E) onto the exposed equalizer bolt thread until the nut seats against the hanger. Torque the nut until it bottoms out on the bolt shoulder at 30-50 ft-lbs.
5. Place the axles into the normal operating position.

# Attaching Parts Kits for Double Eye Spring Axles Installation and Owner's Manual

(For Aftermarket Applications)

6. Attach the new shackle link assemblies (Fig.7A), shackle links (Fig.7B) and mounting nuts (Fig.7C) to the equalizer (Fig.7D) and spring leaf (Fig.7E) on both sides of the equalizer (Fig.7F).

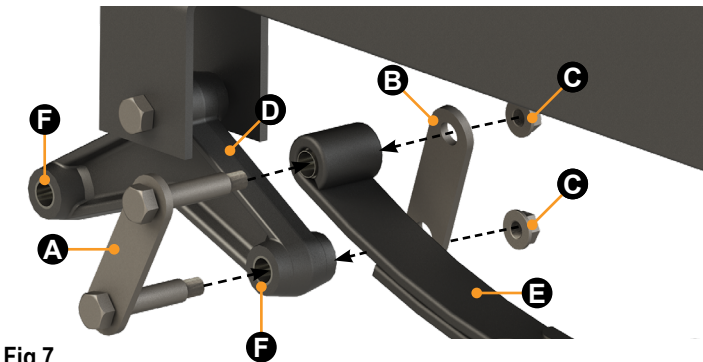


Fig.7

7. Torque the nuts until they bottom out on the bolt shoulder at 30-50 ft-lbs.

**NOTE:** Figure 8 shows a completed tandem axle.



Fig.8

8. If installing a Triple A/P Kit, repeat steps 1-7 for the third hanger (Fig.9B).

**NOTE:** If Installing a Triple Axle A/P kit, EQ-105 Assembly, Part J from the parts list, this equalizer installs on the second hanger from the front of the trailer (Fig.9B).

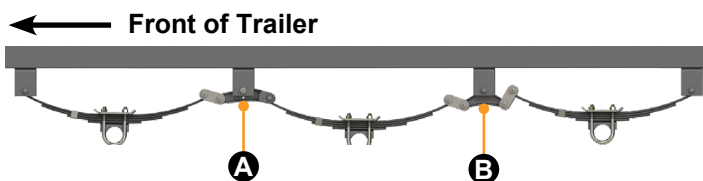


Fig.9

9. Repeat steps 1- 7 or 8 if the step is applicable, for the opposite side of the trailer.

**NOTE:** If using the triple axle grease-able bolts with grease fittings, use any multi-purpose grease marked with the NLGI code of GC-LB.

10. Reconnect electric brakes, if applicable.

11. Remount wheels.

## Wet Bolt A/P Kit Installation

1. Disconnect all internal and external power supplies.

2. Using jack stands to support chassis per manufacturer's recommendations, support axle for safe disassembly of axle bolts and hardware. Reference [TI-083](#) for standard chassis blocking.

3. Remove the wheels and set aside wheels and lug nuts.

4. After removing axle bolts, inspect spring eyes (Fig.10A) for brass bushings (Fig.10B). Replace brass bushings if needed by using the following procedure:

- Place an appropriately-sized punch onto the brass bushing. An appropriately- sized punch will allow the bushing to slip onto the shaft, but not slide off the other end.
- Insert the end of the punch into the spring eye.
- Drive the old bushing out with a hammer.
- As the old bushing is driven out, the new bushing will be inserted into the spring eye.

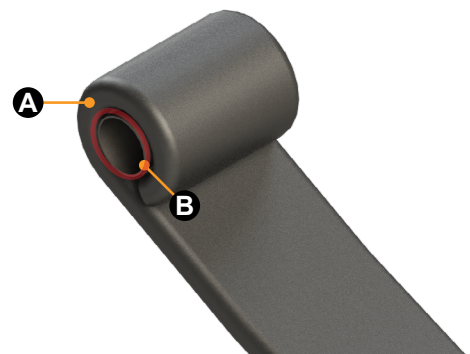


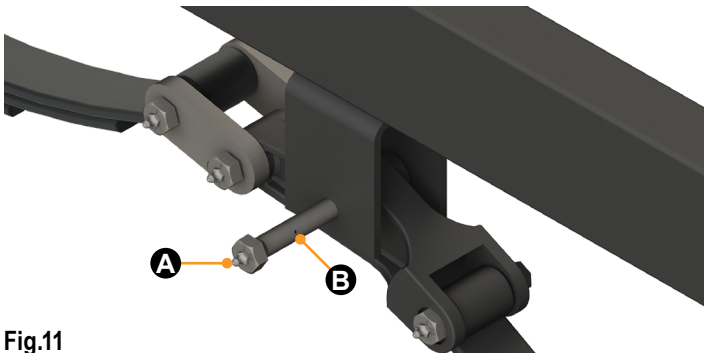
Fig.10



# Attaching Parts Kits for Double Eye Spring Axles

## Installation and Owner's Manual

(For Aftermarket Applications)



**Fig.11**

5. Replace standard mounting hardware, one at a time, with wet bolts and  $\frac{7}{16}$ " locking flange nuts. Insert the wet bolts with the grease fittings (**Fig.11A**) on the inside of the spring hangers into the axle mounting holes. The serrations under the head of the wet bolt should be fully inserted into the hanger or shackle.

**NOTE:** The wet bolt grease hole (**Fig.11B**) should be positioned at 3 or 9 o'clock. If the grease hole locations are not installed properly, the weight of the chassis will prevent the grease from fully lubricating the brass bushings.

**6. Tighten the locking flange nuts to the shoulders of wet bolts. If the serrations under the head of the wet bolt are not fully inserted into the hanger or shackle, carefully tap the wet bolt into position with a rubber mallet or similar tool. Care should be taken not to damage the grease fittings.**

7. Apply enough grease to fully lubricate the brass bushing. Typically, two squirts from a manual grease gun is sufficient.

**8. Reconnect electric brakes, if applicable.**

## 9. Remount wheels.

## Maintenance

Every 12 months or 36,000 miles, which ever comes first, check the equalizers and wet bolts if applicable, to be sure they are free from debris and that the nuts are torqued at 30-50 ft-lbs.

If using the triple axle wet bolts with grease fittings, use any multi-purpose grease marked with the NLGI code of GC-LB.

## Notes



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COMPONENTS

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