



INSTALLATION INSTRUCTIONS

E-Z Flex Suspension Kits

Complete Kits:

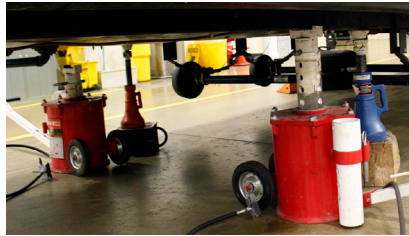
- K71-652-06: 33" Spacing, Tandem Axles, 6,000 lbs. Max. Capacity
- K71-653-06: 35" Spacing, Tandem Axles, 8,000 lbs. Max. Capacity
- K71-656-06: 33" Spacing, Triple Axles, 6,000 lbs. Max. Capacity
- K71-657-06: 35" Spacing, Triple Axles, 8,000 lbs. Max. Capacity

Equalizer Only Kits:

- K71-654-06: 33" Spacing, Tandem Axles, 6,000 lbs. Max. Capacity
- K71-655-06: 35" Spacing, Tandem Axles, 8,000 lbs. Max. Capacity
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Safety Precautions:

Before performing any maintenance or repair work requiring the raising of the vehicle, make sure that the vehicle is properly supported on lift stands of sufficient capacity. Follow the trailer manufacturer's recommendations for lifting and supporting the unit.



Do not lift with or place supports under any part of the suspension system unless specifically directed to do so during the disassembly and reassembly steps of these instructions.

CAUTION

Never rely on jacks alone to support the vehicle. A vehicle that is not securely supported may fall and cause severe injuries or death.

CAUTION

Safety glasses should be worn at all times when assembling or disassembling axles and their components. Failure to comply may result in serious eye injury.

Disassembly:

CAUTION

Axles and suspension components are heavy and must be carefully handled to avoid pinching, straining or crushing injuries to the body.

- When the vehicle is raised and supported with the tires just clear of the ground, remove the wheel/tire assemblies from their respective hubs.
- Disconnect any electrical wires or hydraulic brake lines from the axles.

- Place small jacks under the equalizers. Gently lift the weight of the assembly until the bolts can be easily removed from the center frame hangers. Lower the partially disconnected assembly until the equalizers are clear of their respective hangers.



The following steps only apply to complete kits. Equalizer only kits, skip to **Inspection step 1**.

- Remove the shackle link assemblies that attach the leaf spring ends to the equalizers.
- Carefully remove the spring ends from their respective hangers by supporting their weight and removing the bolts.
- Slide the axles out from underneath the vehicle.

Inspection:

Examine the bolt holes in the frame hangers. Holes that have been elongated or worn larger will not provide a proper fit for the new bolts. The bolt's splined section, adjacent to the bolt head, is designed to create an interference fit in the hanger and prevent bolt rotation.



CAUTION

Loose fitting bolts can result in premature wear and lead to eventual failure. Failure of suspension components may cause loss of vehicle control and result in an accident involving personal property damage, serious injury and/or death.

- If the hanger bolt holes are worn, hangers should be replaced.

CAUTION

Contact the trailer manufacturer for specific instructions regarding the removal of old hangers and installation of new hangers. Improper cutting and welding of these components can adversely affect the structural integrity of the vehicle frame.

Spring Eye Bushing Replacement:

Steps only apply to complete kits. Equalizer only kits, skip to Reassembly step 8.

1. Remove the old bushings from the spring eyes, driving them out with a suitable drift punch. Make sure the spring eyes are clean and free of excessive wear, burrs and sharp edges before proceeding. Damaged springs must be replaced.
2. Drive the new bronze bushings into the spring eyes. The preferred method is to use a piloted punch that closely fits the inside diameter of the bushing. If a punch is not available, a 9/16" bolt can be substituted. Place the bushing squarely against the spring eye, insert the punch (or bolt) into the bushing and drive it into place by firmly striking the punch (or bolt) with a suitable hammer.



CAUTION

Striking the bronze bushing directly with a hammer may deform the inside diameter and prevent reassembly of the bolts.

REASSEMBLY

Note: Some trailer designs or tire sizes may prevent easy access to the grease fittings when assembled in the suggested fashion. The user may choose to assemble the spring attaching bolts and shackle link assemblies from the opposite direction. This will place the grease fittings on the inboard side of the frame, or the standard 1/4"-28 straight grease fittings can be removed and replaced with an angled fitting. These fittings should be available at most automotive parts store.

1. Slide the front and rear axles into position under the frame hangers. Starting with the front axle, lift the front ends of the springs and position them between the legs of the front hangers with the bolt holes aligned.
2. Insert the lubricated spring eye bolts through the outside leg of the hanger, the spring eye and start it through the inside leg of the hanger.



CAUTION

Note the specific radial orientation of the grease holes in the illustrations. Failure to orient the grease holes as shown may restrict the free flow of lubricant and lead to excessive wear.

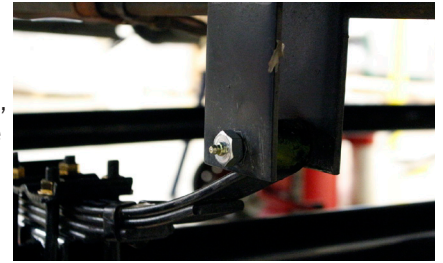
CAUTION

DO NOT HAMMER directly on the grease fitting. Striking the fitting will cause damage and render it inoperable.

CAUTION

Attempts to pull the bolt into place with an impact wrench may strip the threads or cause the bolt to spin and damage the hanger hole and/or bolt spline.

3. Use a suitable hammer to drive the bolt into place. To drive the bolts in, place a small piece of pipe or steel tubing against the head of the bolt. The tube should be approximately 3/8" inside diameter to encircle the grease fitting in the head of the bolt. Strike the end of the tube squarely and firmly. Avoid glancing blows.
4. Continue driving the bolts into the hangers until the bolt heads are seated against the hanger surface. Install the flanged locknut onto the bolt threads with the flanged side of the nut toward the hanger. Tighten the nuts to 30-50 Ft. Lbs. The nut should be seated against the shouldered bolt end.
5. Place the rear ends of the rear axles springs between the legs of the rear hangers. Insert the lubricated spring eye bolts through the outside leg of the hanger, the spring eye and start it through the inside leg of the hanger.



CAUTION

Note the specific radial orientation of the grease holes in the illustrations. Failure to orient the grease holes as shown may restrict the free flow of lubricant and lead to excessive wear.

6. Repeat steps #4 and #5.
7. Apply the supplied anti-seize packet or equivalent to the inside of the steel bushing of the equalizer, then to the outside of the center pivot bolt.



8. Install the new E-Z Flex® equalizer by placing it inside the center hanger, align the center hole of the equalizer to the holes in the hanger.

CAUTION

If your center hanger has a welded reinforcement tube, you must check for adequate clearance of the grease zerks.

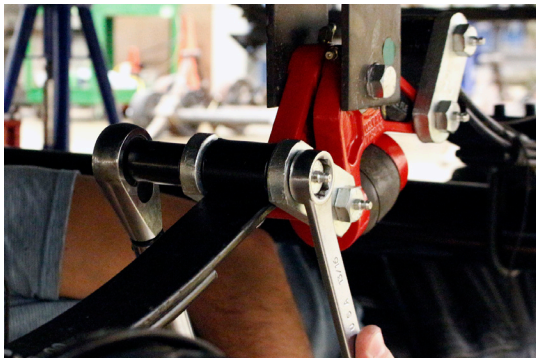
9. Insert the center pivot bolts through the hanger hole and into the equalizer center hole.

10. Use a suitable hammer to drive the center pivot bolts into the hanger until the bolt head is seated against the hanger surface.

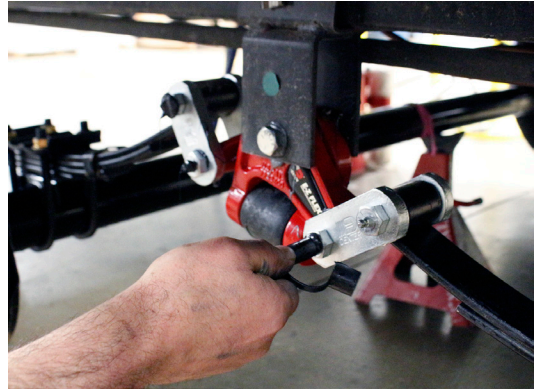
CAUTION

Attempts to pull the bolt into place with an impact wrench may strip the threads or cause the bolt to spin and damage the hanger hole and/or bolt spline.

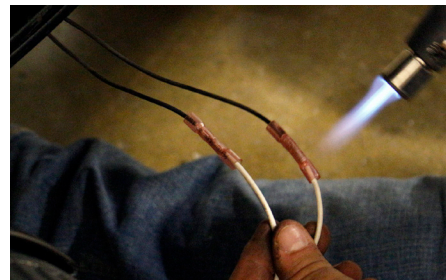
11. Install the lock nut and tighten to 65-75 Ft. Lbs., thereby pinching the protruding steel bushing between the inside hanger side surfaces. On triple axle installation, install all equalizers before attaching axles.
12. Attach the shackle link/bolt assemblies to the equalizers and spring eyes. Lift the axles into their standard operating position with the spring eyes above the equalizers' lower holes. Insert the shackle link/bolt subassembly into both the equalizer and spring eye at the same time.
13. For triple axles only: Continuing with the center axle, lift the front ends of the springs until they are positioned in the yoke ends of the front equalizers and are aligned to the bolt holes. Insert the lubricated bolts through the holes taking care to orient the grease holes as previously noted. Assemble and tighten the nuts to 30-50 Ft. Lbs. The nuts should be seated against the shouldered bolt ends.
14. Slide the plain shackle links onto the bolt ends that protrude through the springs and equalizers. Install the flanged lock nuts onto the bolts and tighten to 30-50 Ft. Lbs.



15. Check the suspension for freedom of movement by lifting either of the axles. When one axle is lifted, the other should move downward and should return to its normal position when the lifting force is released.
16. Lubricate all the grease fittings using a Lithium complex grease, NLGI No. 2 such as Mobil Oil Company Mobilgrease HP or equivalent. Pump the grease in until it begins to show at the ends of the bronze bushings. For best results, the suspension should be lubricated every 3,000 miles.



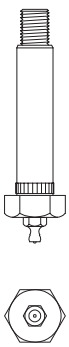
17. Reconnect Brakes:
 - a. Electric: Remove protective sheathing from both magnet and trailer wire lead, 3/8" from end. Insert and crimp bare wire ends into butt connectors before using heat to seal the connection. If thermal connectors are not available, please use tape to seal the connection.
 - a. Hydraulic: Make sure to reconnect the hydraulic lines at all wheel ends with the appropriate torque for your brake type. Then purge air from the brakes using the brake bleed instructions from your actuation system.



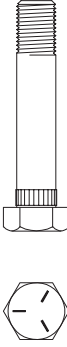
2. Reinstall the tire/wheel assemblies, following the instructions provided by the manufacturer.

Parts Identification:

Shoulder Shackle Bolt with Grease Fitting



Center Pivot Bolt



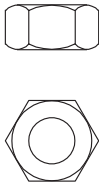
Bronze Bushing



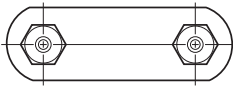
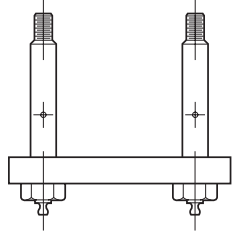
Flange Locknut for Shackle Bolts



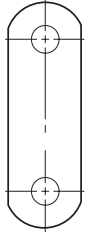
Hex Locknut for Center Pivot Bolts



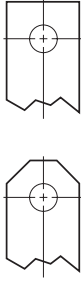
Shackle Link Assembly



Shackle Link

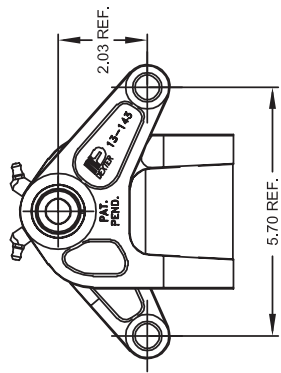


Optional End Designs



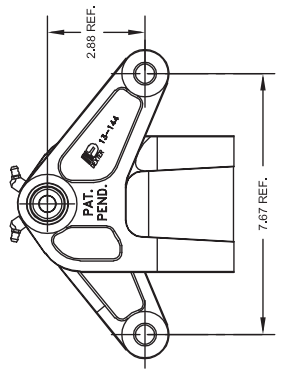
K71-652-06 & K71-656-06

E-Z Flex® Equalizer



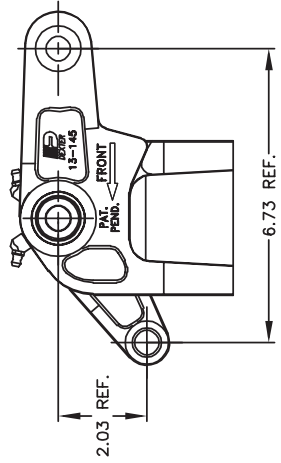
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E-Z Flex® Equalizer



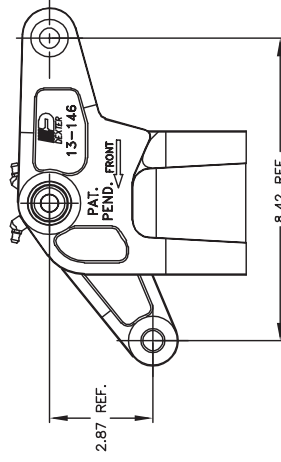
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E-Z Flex® Equalizer



K71-657-06

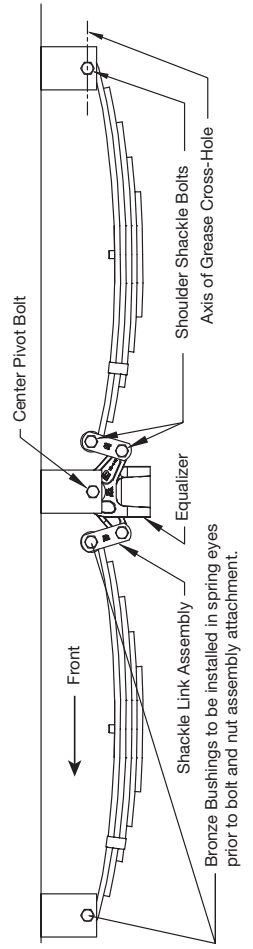
E-Z Flex® Equalizer



Hanger Identification:

If Static Bump Clearance is greater than 2.5", a bump stop should be used to avoid over-stressing of leaf springs. Static Bump Clearance of less than 1.5" may limit full suspension movement and result in possible damage to the frame and/or axles when operating on some rough and uneven road surfaces. Tire clearance should always be greater than bump clearance to help prevent tire contact to underbody surfaces in the event of a suspension component failure.

Typical Tandem Axle Installation



Typical Triple Axle Installation

