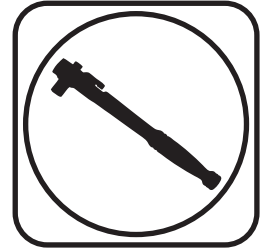




Part # 11709511/11709512 - 2007-2013 Silverado Axle Flip Kit

Recommended Tools



2007-2013 Silverado Axle Flip Kit Installation Instructions

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SHOCKS ARE **NOT** INCLUDED WITH KIT # 11709512.





Major ComponentsIn the box

Item #	Part #	Description	QTY
1	90001363	Rear Shackle Frame Mount	2
2	90001364	Rear Shackle	2
3	90002672	Shackle Inner Bushing Sleeve - Installed in shackle	2
4	70012461	Shackle Bushing - Installed in shackle	4
5	90001365	Flip Bracket	2
6	90001366	Clamp Plate	2
7	90001367	Brake Line Tab	1
8	99626004	U-Bolt - 3.375" W x 7.00" L x 5/8"-18	4
9	90002640	Bump Stop	1
11709511 KIT SHOCKS (Shock are NOT included with 11709512 Kit)			
10	986-10-020	7.55" Stroke Shock	2
11	70011138	3/4" ID Shock Bushing	4
12	70011186	5/8" ID Shock Sleeve (2 per Eyelet)	8

Hardware Kit - 99010131

QTY	Part Number	Description
REAR LEAF MOUNT		
2	99561012	9/16-18 x 4 1/2" Hex Bolt
2	99562001	9/16-18 Nylok Nut
4	99566003	9/16" SAE Flat Washer
REAR LEAF MOUNT FRAME BRACKET		
6	99431021	7/16-14 X 1 1/4" Hex Bolt
6	99432010	7/16-14 Nylok Nut
12	99433005	7/16 SAE Flat Washer

QTY	Part Number	Description
BRAKE LINE RELOCATION		
3	99311001	5/16"-18 X 1" Hex Bolt
3	99312003	5/16-18 Nylok Nut
7	99313002	5/16" SAE Flat Washer
1	99081007	M8-1.25 x 20mm Hex Bolt
U-BOLT		
8	99622013	5/8-18 High Nut
8	99623001	5/8" SAE Flat Washer

Getting Started.....

THIS KIT CAN BE SETUP TO LOWER THE REAR OF YOUR TRUCK 3 DIFFERENT HEIGHTS. IT CAN BE SET TO LOWER THE REAR OF THE TRUCK 5 1/2", 6" OR 6 1/2". THIS HEIGHT ADJUSTMENT IS BUILT INTO THE REAR SPRING HANGER. BEFORE YOU START THE INSTALL, MEASURE THE HEIGHT OF YOUR TRUCK TO HELP DETERMINE HOW YOU WANT IT TO SIT. THE RIDETECH FRONT KIT HAS SOME ADJUSTMENT TOO. THE FRONT KIT WILL LOWER THE TRUCK 3"-4". YOUR TIRE HEIGHT WILL PLAY A FACTOR ON HOW LOW YOU CAN SET THE FRONT SUSPENSION.

1. Raise the vehicle to a safe and comfortable working height and support it by the frame. You will need to be able to move the rear differential up and down. Use a jack under the rear axle to raise and lower it during the install.
2. Jack up the rear end slightly to remove the tension from the rear shocks. Remove the shock absorbers. For proper function, they should be replaced with the Ridetech HQ Series shocks 22189864. Shock are included with Kit # 11709511. Shocks are NOT included with Kit # 11709512



Disassembly

3. Lower the jack to relieve the tension on the rear springs, but keep the jack touching the rear axle.
4. Remove the u-bolts and axle clamps to disengage the axle from the leaf springs.
5. Lower the axle to get clearance on the leaf springs, but **DO NOT** strain the brake lines.
6. The rear of the leaf springs will need to be disconnected to install the new hanger setup and to move the springs under the axle.
7. Support the rear of the leaf spring and remove the leaf spring shackle bolt.

Repeat Steps 4 - 7 on the 2nd leaf spring.



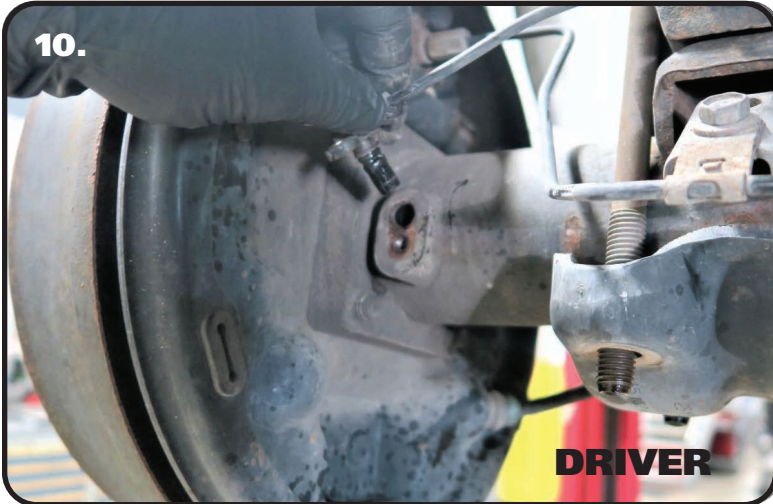
8. The OEM bump stop mount will need to be cut off the frame. We do this by cutting the weld with a cut off wheel on a die-grinder. Cut in the center of the weld without going too deep. Cutting too deep will cut into the frame.



9. We recommend grinding the remaining weld down until it is smooth. Paint the exposed metal to keep it from rusting.

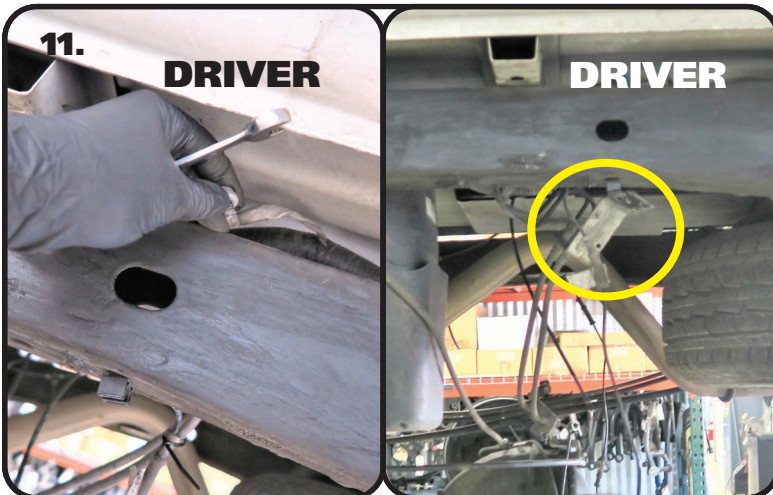


Disassembly



10. Remove the ABS sensors from the axle tubes on driver and passenger side. **DRIVER SIDE IS SHOWN IN IMAGE 10.**

NOTE: Some trucks do not have the ABS sensors in the axle tubes.



11. Unbolt the brake line bracket from the top of the drivers side frame rail. This will help provide enough slack in the lines to be able to flip the leaf springs on the bottom side of the axle. Retain the hardware, this bracket will be reinstalled later.



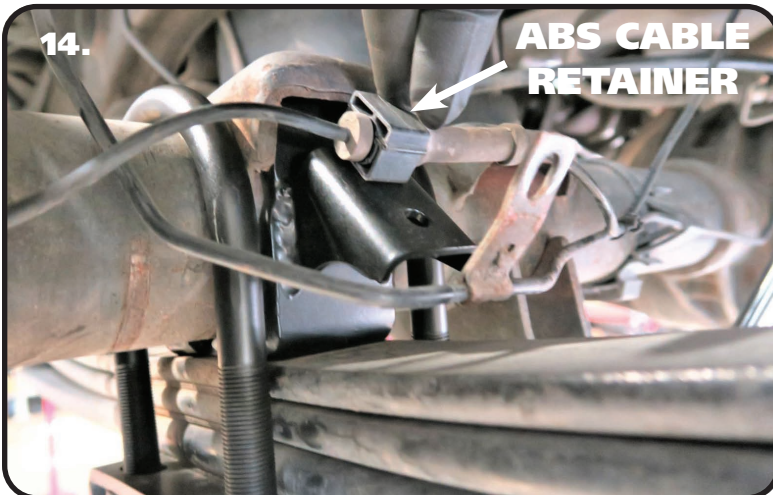
12. Remove the emergency brake cable holder from the driver side frame rail. Again, this bracket will be reinstalled later.



Disassembly



13. Remove the bolt from the brake line retainer. The brake line retainer bolts to the bracket that is on the rear side of the leaf spring perch. Remove these from both sides of the axle. These will be reinstalled later.



14. Remove the ABS cable from the retainer that is attached to the same bracket as the brake line retainer. Remove the ABS cable retainer from the bracket. These will be reinstalled later.



15. The bracket that is at the rear of the OEM leaf spring perch will need to be cut off of the axle tube. We use a saw-z-all to cut it off. It needs to be cut off even with the axle, perpendicular to the top of the leaf spring perch. Use **Images 15 & 16** as a reference.



Disassembly



16. Image 16 illustrates the bracket cut off. Again, we use a saw-z-all to cut it off.



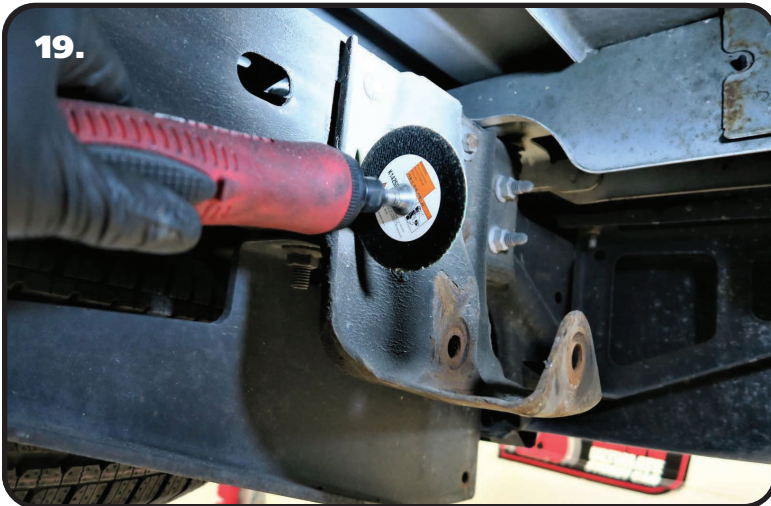
17. The leaf spring locating pin needs to be flipped over. Currently, the nut for the pin is on the top side of the leaf spring pack. The nut will need to be on the bottom side for proper location of the flip bracket. The u-bolt locating plate will need to be removed and discarded. To remove the pin and u-bolt locator, clamp the leaf springs together in front of and behind the u-bolt locator. With the leaf spring clamped, remove the nut from the locating pin. Next, remove the u-bolt locator and discard it.



18. Remove the locating pin from the leaf spring pack. Reinstall the locating pin from the TOP side. Reinstall the nut on the BOTTOM side and tighten. With the nut tight, remove the clamps. Repeat on the second spring.



Disassembly



19. The rear leaf spring hanger will need to be removed from the frame. It is held on by (1) bolt and (3) rivets. Remove the bolt and retain it for installation of the new hanger. We remove the rivets by cutting a " + " in the rivet head and chiseling it off. After chiseling the head off, drive the rivet out of the hanger/frame with a punch.



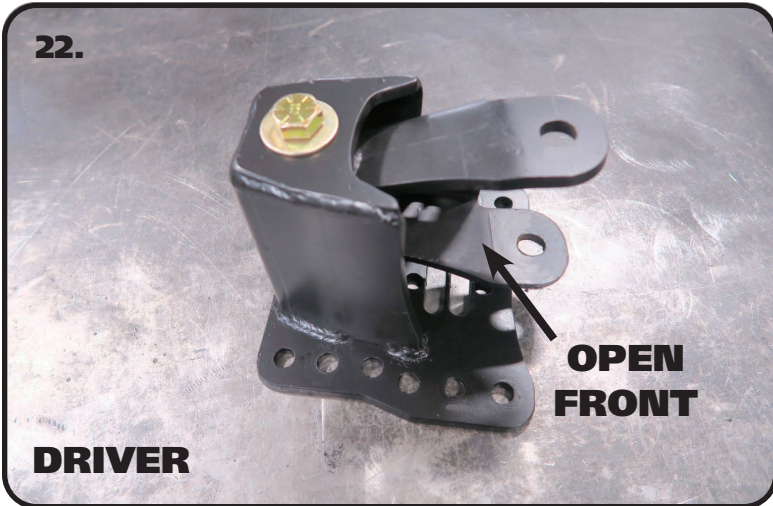
20. The OEM leaf spring hanger includes a second bracket that is riveted to the bottom of the frame. Again, cut a " + " in the head of the rivet and chisel it off. After removing the head of the rivet, drive it out of the frame/bracket with a punch. Repeat steps 19-20 on the second hanger.



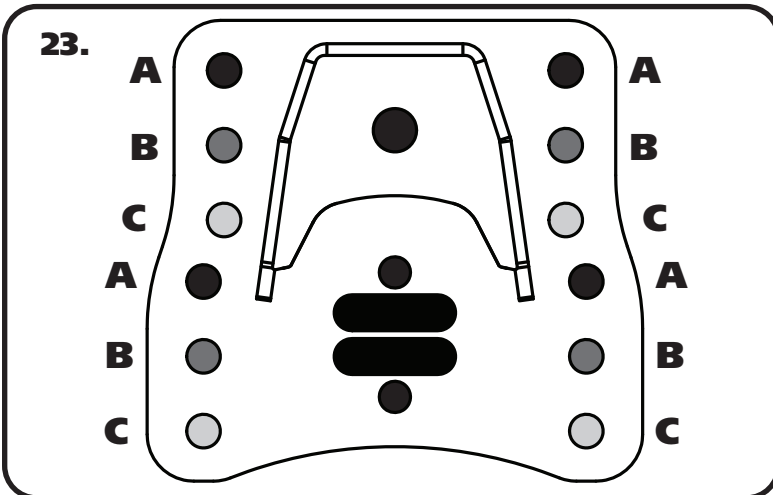
21. The leaf springs can be flipped to the bottom side of the axle without removing the axle or the front of the leaf spring. Start by pushing the axle to one side. **Avoid excessive force on the brake lines and ABS wires.** Grab the rear of the leaf spring that is on the side that is opposite of the direction you pushed the axle. Push the leaf spring over to clear the end of the axle. While pushing the leaf spring over, move the leaf spring down to get below the axle. Repeat for the second spring, pushing the axle the opposite direction.



Shackle & Hanger Installation



22. Assemble the Hangers and Shackles. The hangers and shackles are the same for both sides. What determines driver from passenger is which direction the open side of the shackle is facing. **Image 22** is of the DRIVER side. Insert the delrin end of the shackle into the hanger, paying attention to the open side of the shackle. Line up the hole of the hanger with shackle's inner sleeve. Install a 9/16" flat washer on a 9-16"-18" x 4 1/2" bolt. Insert the bolt/washer in the aligned hole of the shackle and hanger. Install a 9/16" flat washer and 9/16"-18 nylok nut on the threads of the bolt that are sticking through the hanger. Repeat on other shackle/hanger with the open side of the shackle facing the opposite direction of the one just assembled. Do not tighten hardware at this time.



23. The hanger can be bolted to the truck at (3) different heights. Position A = 5 1/2" drop, Position B = 6" drop, Position C = 6 1/2" drop. If you are unsure where to set it at this time, install the hanger in position B.



24. Determine the set of holes that you are going to be using to attach the hanger. The Hanger is bolted to the frame in the OEM location with the open side of the shackle to the front of the truck. The REAR UPPER hole reuses the OEM bolt that was removed earlier. Install the OEM bolt in the rear upper hole. This will help hold the hanger while inserting the remaining bolts.



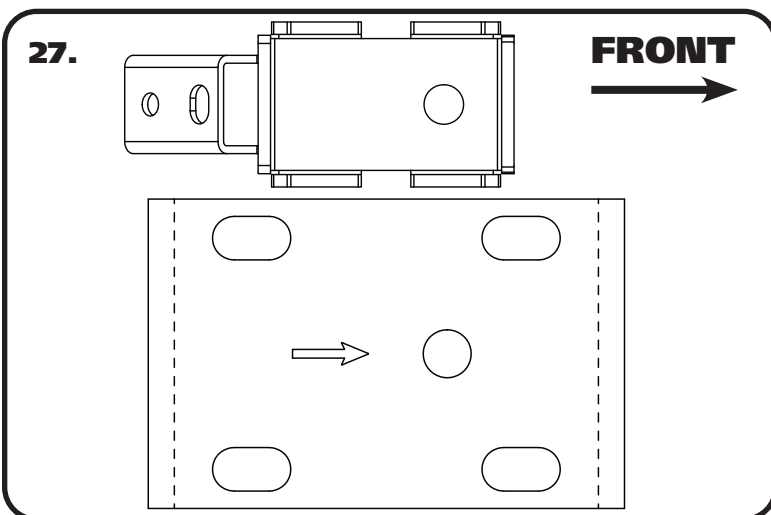
Hanger & Flip Bracket Installation



25. Install a 7/16" flat washer on each of (3) 7/16"-14 x 1 1/4" bolts. Align the correct holes of the hanger with the OEM holes in the frame. Install a bolt/washer in each one. Install a 7/16" flat washer and 7/16"-14 nylok nut on the threads of the bolts that are sticking through the frame. Torque the hardware to 70 ftlbs.



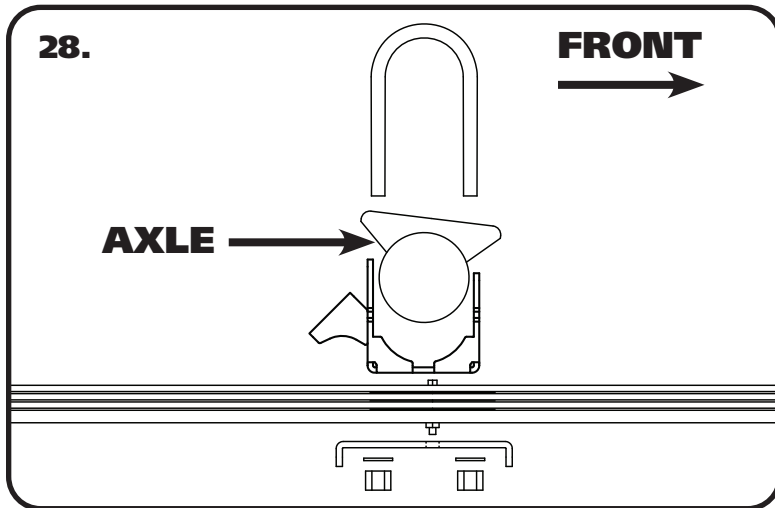
26. Raise the rear of the leaf spring up until it lines up with the rear shackle. You may have to jack up the rear differential. Install the OEM hardware that was removed earlier. Repeat on the second spring. Do not tighten the hardware at this time.



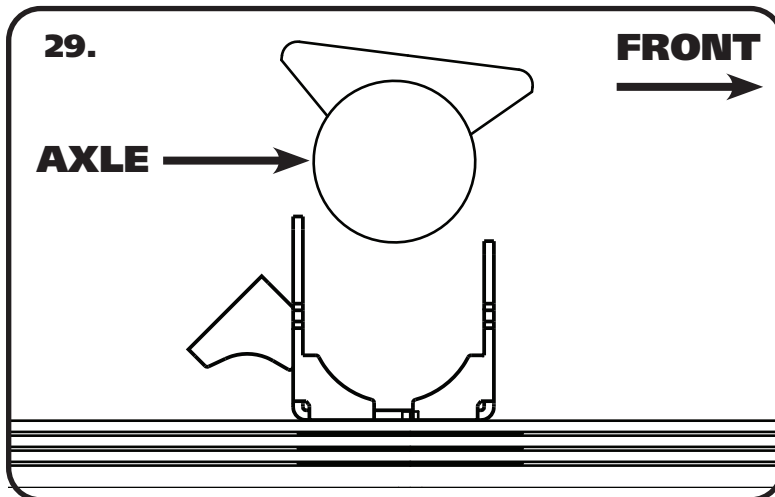
27. The Flip Kit has the locating holes offset to center the wheel in the wheel opening. **Image 27** illustrates a top view of the Flip Bracket and the Leaf Spring Plate. Notice the CENTER Hole is offset to the FRONT of the truck. The Flip Bracket has a brake line tab that will need to be positioned to the rear of the truck. The ARROW in the plate needs to point to the front of the truck.



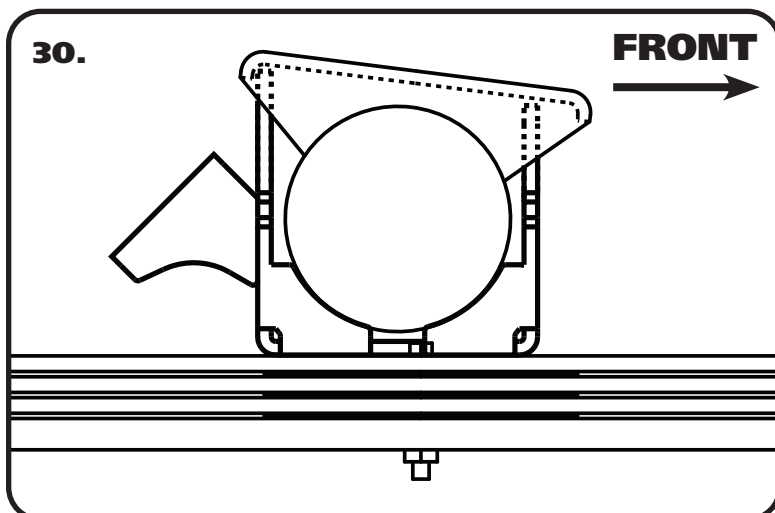
Flip Bracket Installation



28. Image 28 is an illustration with the parts exploded to assist in the assembly of the flip kit.



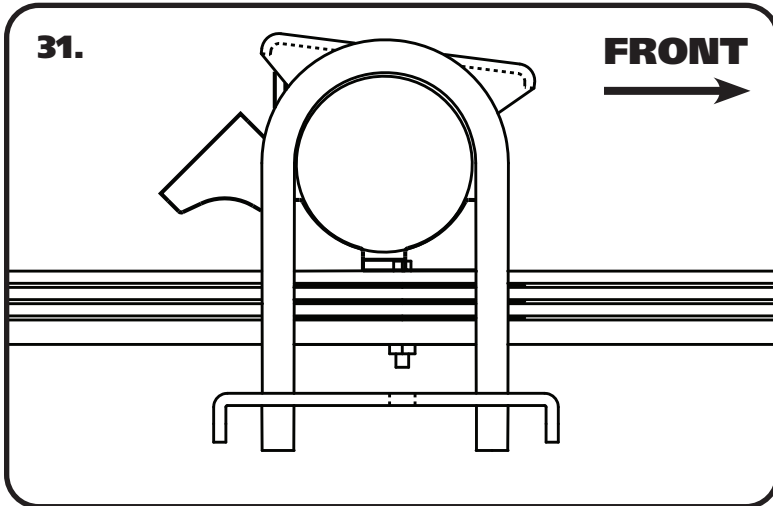
29. Set the Flip Bracket onto the leaf spring with the CENTER HOLE OFFSET TO THE FRONT OF THE TRUCK AND THE BRAKE LINE TAB TO THE REAR OF THE TRUCK.



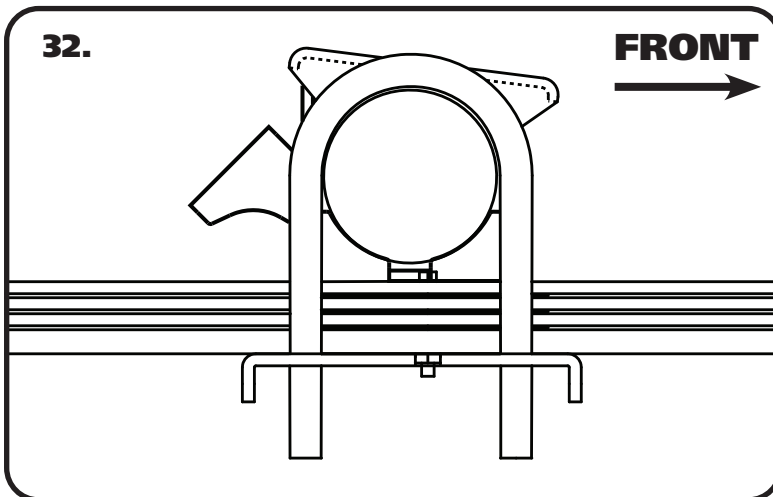
30. Slowly lower the axle into the Flip Bracket making sure the tabs go up into the leaf spring saddle. THE FLIP BRACKET WILL POSITION THE PINION AT THE CORRECT ANGLE.



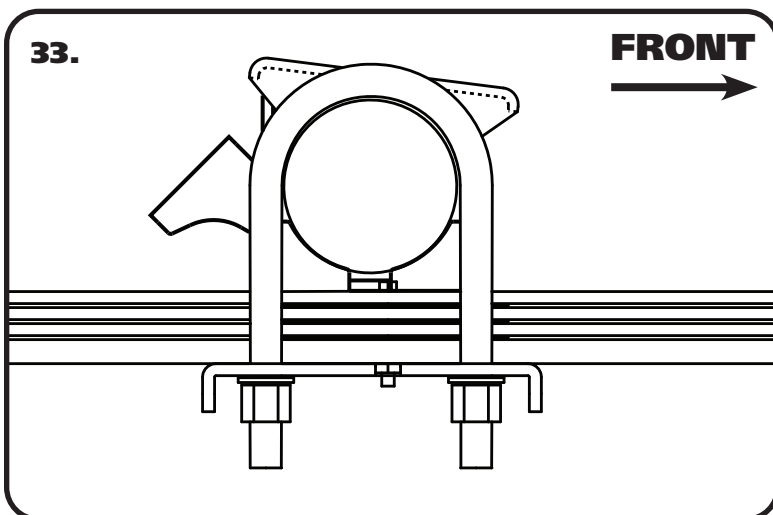
Flip Bracket Installation



31. Slip the U-Bolts over the axle tube with the threads pointing down.



32. Slip the Leaf Spring Bracket up onto the U-Bolts WITH THE OFFSET HOLE FORWARD. THE ARROW ON THE BRACKET SHOULD POINT TO THE FRONT OF THE TRUCK.



33. Hold the Leaf Spring Bracket in place and install a 5/8" Flat Washer & 5/8"-18 High Nut on the threads of the u-bolts. Snug the nuts down evenly and tighten them in a criss-cross fashion to 130 ftlbs.



Installation Finish



34. Snap the ABS cable retainer into the upper hole of the flip bracket tab. Insert the ABS cable into the retainer and snap the retainer closed. Line up the hole of the brake line tab with the lower hole of the flip bracket tab. Install a 5/16" flat washer on a 5/16"-18 x 1" bolt. Insert the bolt/washer through the brake line tab and flip bracket tab. Install a 5/16" flat washer and 5/16"-18 nylok nut on the threads of the bolt sticking through the tab. Torque to 17 ftlbs. Repeat on the other side.



35. Remove the OEM brake line bracket that attaches to the differential cover bolt and brake line mount. Attach the new brake line bracket to the differential using the supplied M8-1.25 x 20mm bolt and 5/16" flat washer. Attach the brake line mount to the new brake line tab using (1) 5/16"-18 x 1" bolt, (1) 5/16"-18 nylok nut, and (2) 5/16" flat washers. Torque the M8 to 225 inlbs and the 5/16" to 17 ftlbs.



36. A hole will need to be drilled and tapped to 3/8"-16 to install the bump stop. This hole needs to be located directly above the center of the axle. Mark the location and drill with a 5/16" drill bit. Tap the hole 3/8"-16. Thread the supplied bump stop into the hole until it is tight. Repeat on the other side.

37. Install the Ridetech HQ Series Shock Kit.

38. Reinstall the bed if you removed it.

39. Set the truck on the ground. Torque the leaf spring and shackle hardware to 90 ftlbs.



Shock Installation 11709511 KIT ONLY

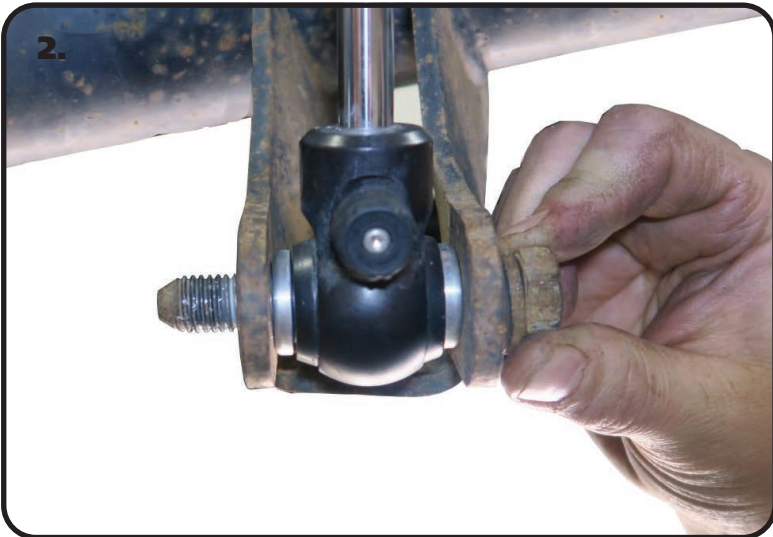
11709512 KIT DOES NOT INCLUDE SHOCKS!!

1.



1. Install the BODY of the shock in the OEM frame mount using the OEM hardware.

2.



2. Attach the EYELET of the Shock in the OEM mount that is on the axle housing. Attach the shock using the OEM hardware. Position the Shock with the Adjuster Knob pointing out, away from the axle.



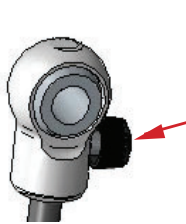
Shock Installation and Adjustment

Shock adjustment 101- Single Adjustable

Rebound Adjustment:

How to adjust your new shocks

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet or stud top. You must first begin at the ZERO rebound setting, then set the shock to a street setting of 12 or handling setting of 8.

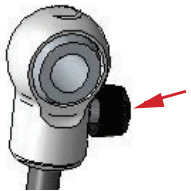


-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.



-Now turn the rebound adjuster knob counter clockwise 12 clicks. This sets the shock at 12 for a street setting. If you are after a handling setting only go 8 clicks.

Take the vehicle for a test drive.



-if you are satisfied with the ride quality, do not do anything, you are set!

-if the vehicle is too soft increase the damping effect by rotating the rebound knob clockwise 3 additional clicks.

-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

Note:

One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.