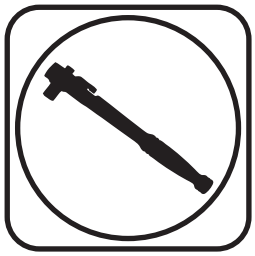
ridetech

Installation Instructions

Part # 11709511/11709512 - 2007-2018 Silverado Axle Flip Kit

Recommended Tools



2007-2018 Silverado Axle Flip Kit

Installation Instructions

Table of contents

SHOCKS ARE NOT INCLUDED WITH KIT # 11709512.

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REV7 4/16/25

812-482-2932

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Installation Instructions

Major Components .....In the box

Item #	Part #	Description	QTY
1	90001363	Rear Shackle Frame Mount	2
2	90003550	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	90001142	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	70015643	Bump Stop	2
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
U-BOLT		
8	99622013	5/8-18 High Nut
8	99623001	5/8" SAE Flat Washer
BUMP STOP		
2	99371034	3/8"-16 x 1" Socket Head

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
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

Getting Started.....

THIS KIT CAN BE SETUP TO LOWER THE REAR OF YOUR TRUCK 3 DIFFERENT HEIGHTS. IT CAN BET SET TO LOWER THE REAR OF THE TRUCK 5 1/2", 6" OR 6 1/2"(6" & 6 1/2" ARE NOT RECOMMENDED WITHOUT C-NOTCH). 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. Shocks 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.

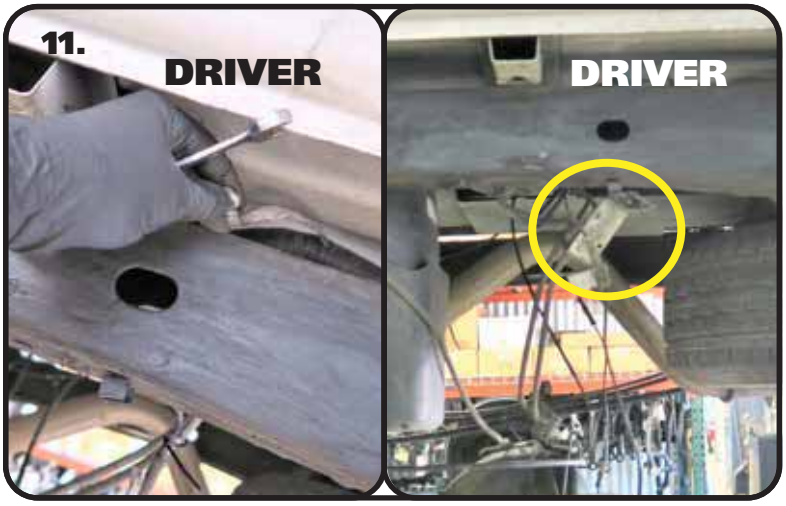
8. The OEM bump stop mount will need to be cut off the frame. We do this by cutting the weld with a cut off wheel on a die-grinder. Cut in the center of the weld without going too deep. Cutting too deep will cut into the frame.

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.

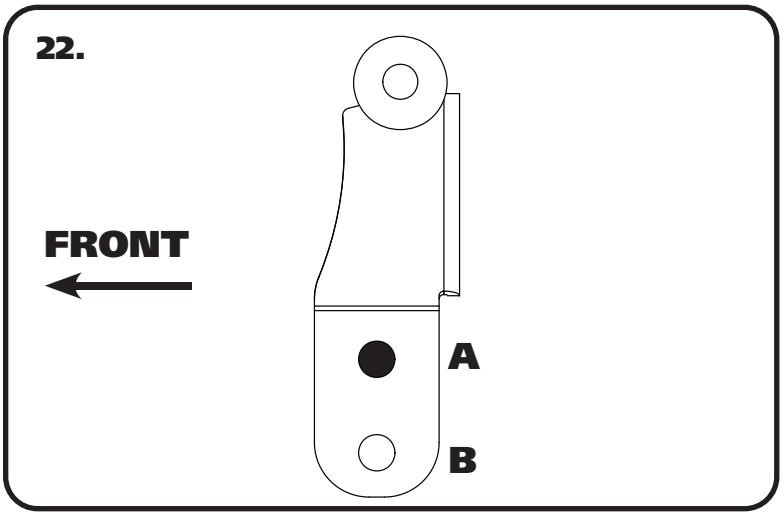
Disassembly

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 if off. After chiseling the head off, drive the rivet out of the hanger/ frame with a punch.

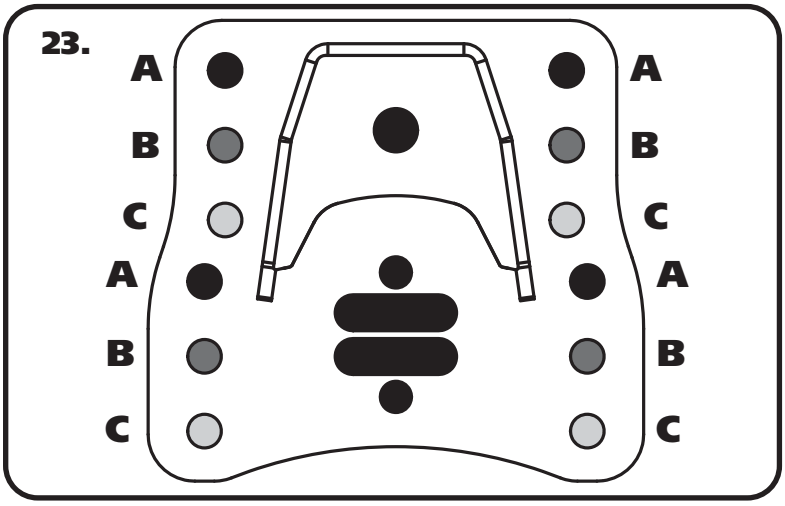
20. The OEM leaf spring hanger includes a second bracket that is riveted to the bottom of the frame. Again, cut a " + " in the head of the rivet and chisel it off. After removing the head of the rivet, drive it out of the frame/ bracket with a punch. Repeat steps 19-20 on the second hanger.

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. The rear shackle has 2 leaf spring mounting holes to aid in fine tuning the ride height of your truck. The Standard mounting hole is the top hole "A". Installing the leaf spring in the bottom hole "B" will raise the rear of the truck approximately 3/4". The open side of the shackle will face the front of the truck.



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 A.

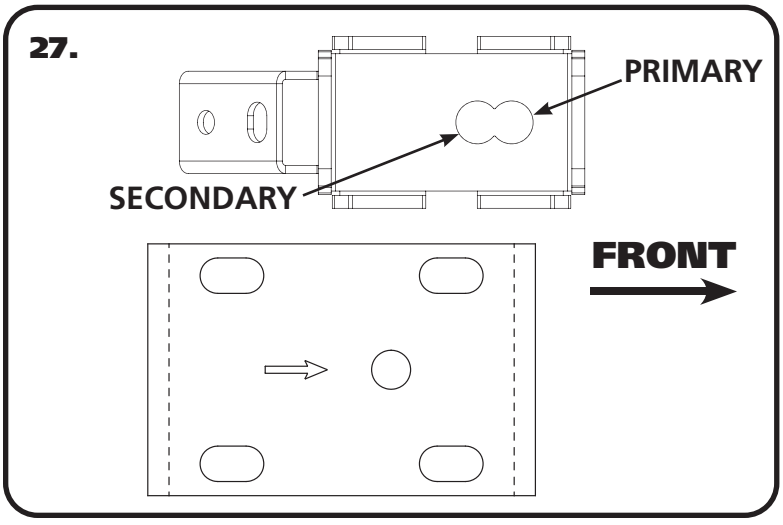
NOTE: 6" & 6 1/2" drop settings are not recommended without c-notches.

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. 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.

Hanger & Flip Bracket Installation

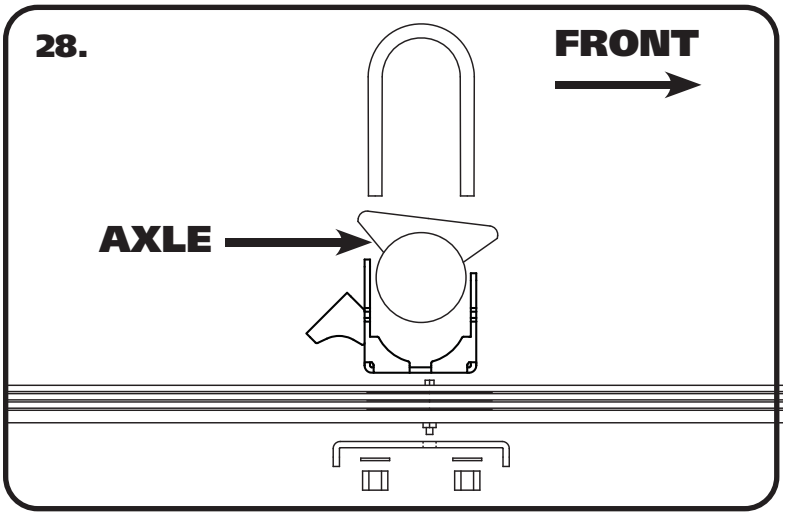
25. Install the shackle on the rear eyelet of the leaf spring with the open side facing the front of the truck. Align the top mounting hole with the leaf spring bushing. Install the OEM hardware that was removed earlier. Repeat on the second spring. Do not tighten the hardware at this time.

26. Raise the rear of the leaf spring up until the rear shackle bushing lines up with the mounting hole of the leaf spring hanger. 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. Torque the shackle bolt to 90 ftlbs. The leaf spring bolt will not be tightened until the truck is sitting on the ground.

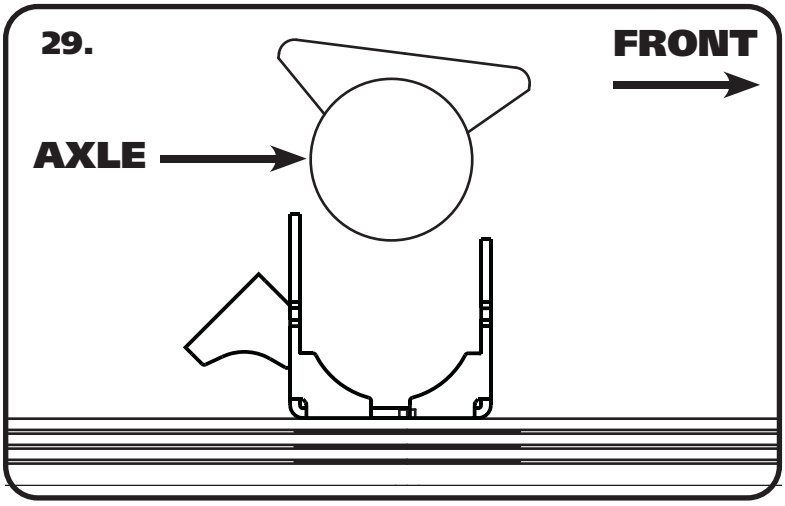


27. The Flip Kit has the locating holes offset to center the wheel in the wheel opening. **Image 27** illustrates a top view of the Flip Bracket and the Leaf Spring Plate. The holes are offset to the FRONT of the truck. The Flip Bracket has a brake line tab that will need to be positioned to the rear of the truck. The ARROW in the spring plate should point to the front of the truck.
We recommend initially locating the flip bracket using the PRIMARY hole. If the axle appears too far back in the wheel opening, moving to the SECONDARY hole will move the axle forward.

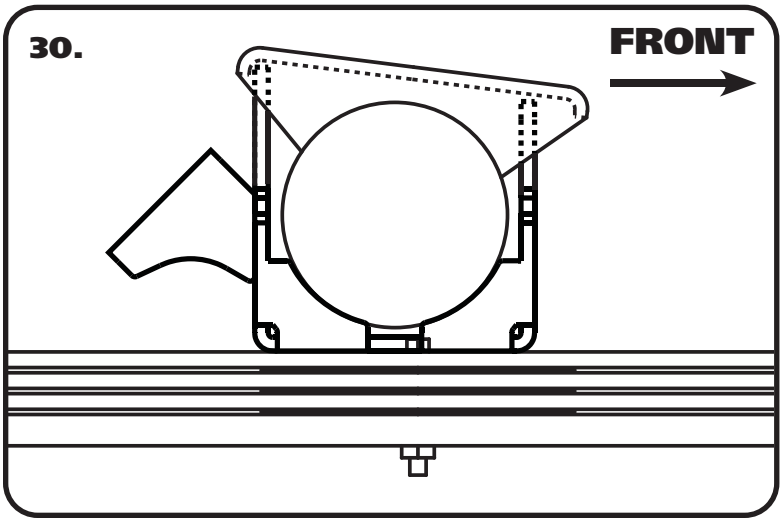
Flip Bracket Installation



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

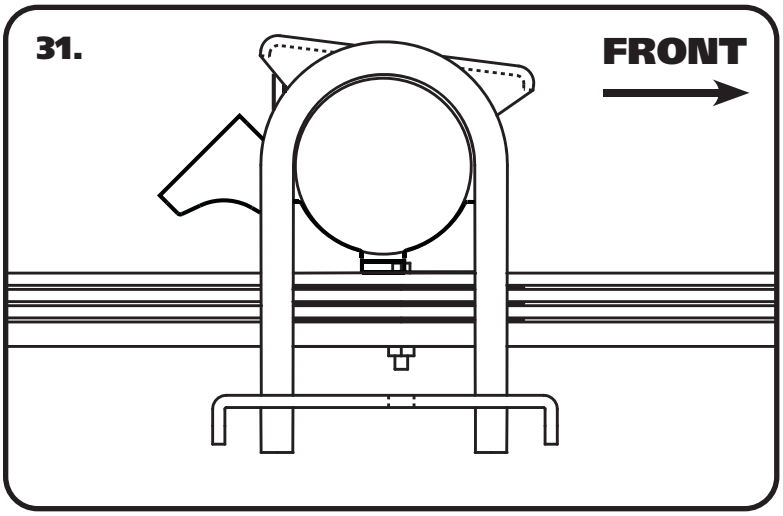


29. Set the Flip Bracket onto the leaf spring with the CENTER HOLE OFFSET TO THE FRONT OF THE TRUCK AND THE BRAKE LINE TAB TO THE REAR OF THE TRUCK.

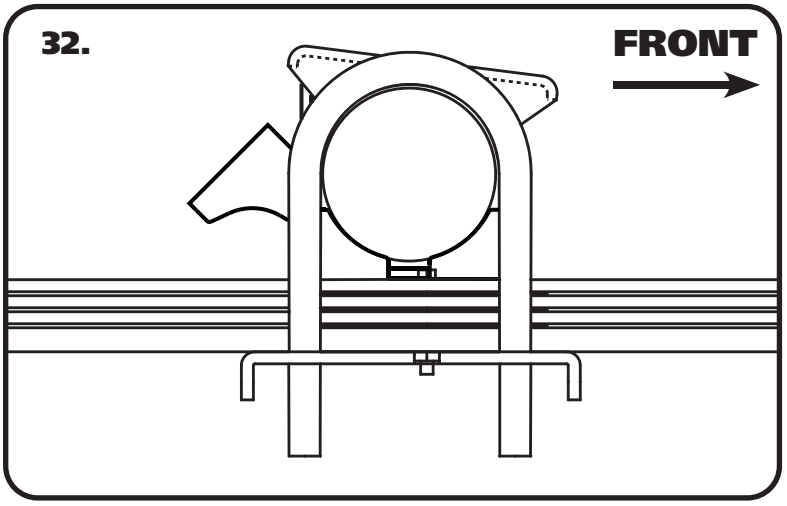


30. Slowly lower the axle into the Flip Bracket making sure the tabs go up into the leaf spring saddle. THE FLIP BRACKET WILL POSITION THE PINION AT THE CORRECT ANGLE.

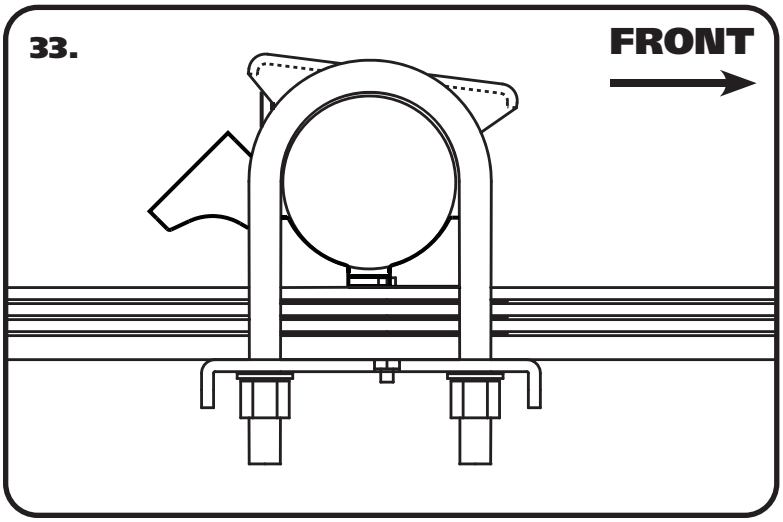
Flip Bracket Installation



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 in-lbs and the 5/16" to 17 ftlbs.

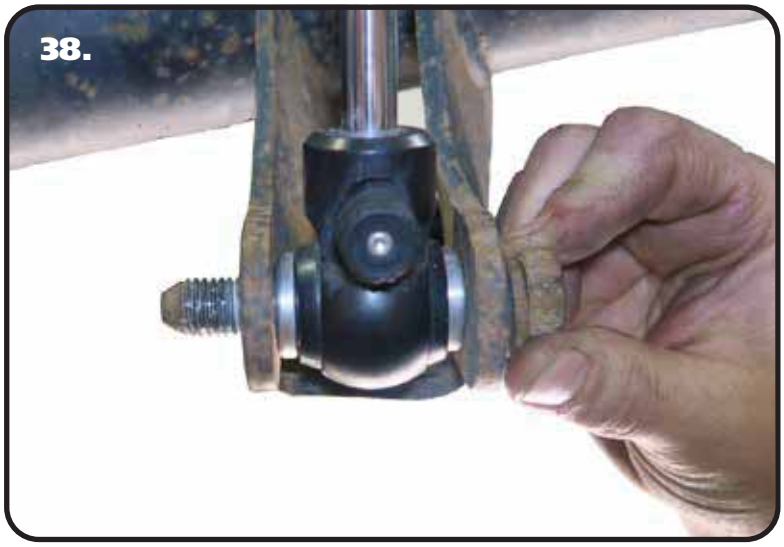
36. A hole will need to be drilled and tapped to 3/8"-16 to install the bump stop. This hole needs to located directly above the center of the axle. Mark the location and drill with a 5/16" drill bit. Tap the hole 3/8"-16.. Install the bump stop using a 3/8"-16 x 1" socket head bolt. Hold the bump stop with your hand and insert the bolt through the center of the bump stop. Line up the bolt of the bump with the tapped hole of the frame. Tighten the bolt to 35 in-lbs. Repeat on the other side.

IF NOT INSTALLING SHOCKS, SKIP TO STEP 39!

Shock Installation 11709511 KIT ONLY

11709512 KIT DOES NOT INCLUDE SHOCKS!!

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



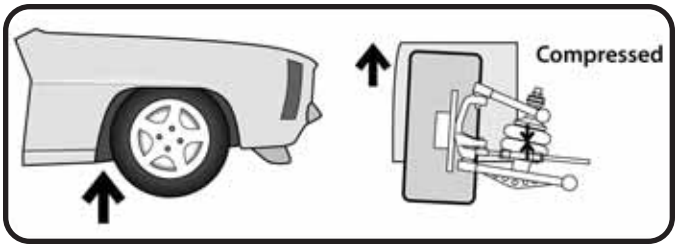
38. Attach the EYELET of the Shock in the OEM mount that is on the axle housing. Attach the shock using the OEM hardware. Position the Shock with the Adjuster Knob pointing out, away from the axle.

39. Reinstall the bed if you removed it.

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

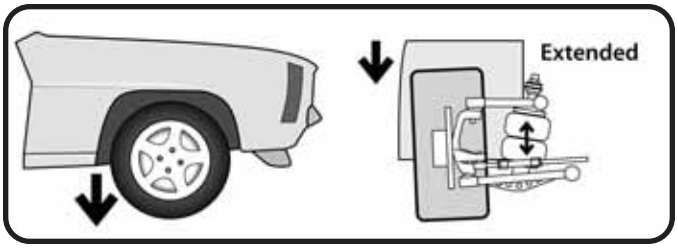
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

The Basics...



COMPRESSION

This typically occurs when you hit a bump in the road. The bump forces the wheel/tire/suspension assembly to "compress" or move upwards into the car.



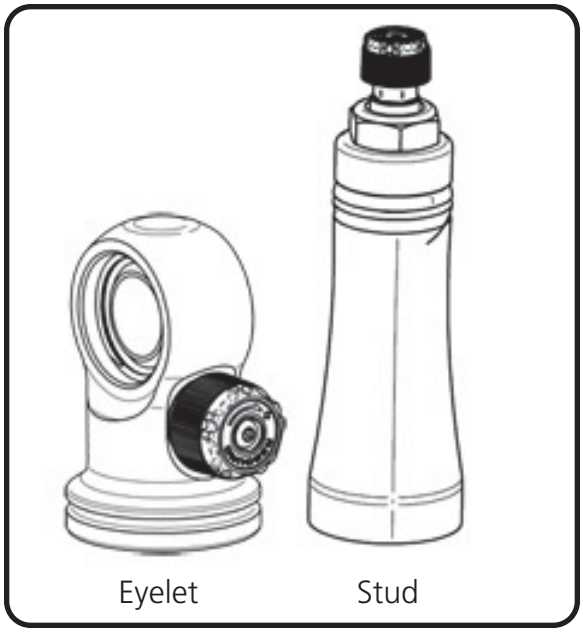
REBOUND

Rebound is the opposite of compression. This occurs when the wheel/tire/suspension assembly falls into a pothole, or simply "rebounds" from being compressed.

Where Are The Knobs?

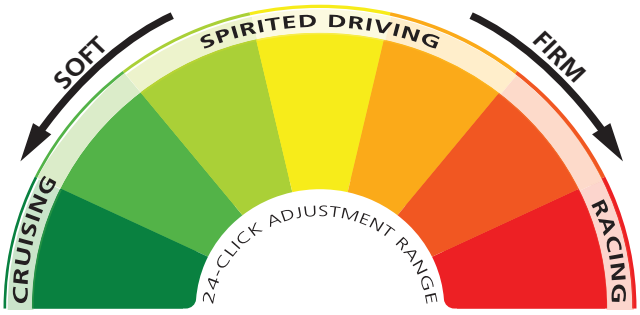
HQ Series Shocks

- **The adjustment knob is located on the top of the shock, either protruding from the side of the eyelet, or atop the stud.**
- **This knob provides rebound adjustment only.**



Knob Function

Counterclockwise = Softer



Clockwise = Firmer

TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

Initial Rebound Setting

NOTE: Before jumping straight to a middle-of-the-road shock setting, we recommend you experience the full range of adjustment potential of your new shocks by first driving your vehicle at both the "full stiff" and "full soft" settings. Understanding how your shocks behave at these extremes will provide recognizable reference points as you attempt to dial in your settings.

1. Begin by setting your shocks to the "full stiff", or minimal rebound position. You do this by turning the adjustment knob clockwise until it stops.

2. Now turn the adjustment knob counterclockwise 12 clicks. This is the approximate center of the adjustment range.

3. Take the vehicle for a test drive. Try to determine if you are experiencing any of the unwanted behaviors found at the extremes of the adjustment range. If you are satisfied with the ride quality and handling, you're all set. Enjoy the ride!

4. If the vehicle feels too "floaty" or soft, turn the knob a few clicks clockwise to increase the damping effect.

If the ride quality is still too harsh or stiff, turn the knob a few more clicks counterclockwise to decrease the damping effect.

5. Take the vehicle for another test drive. If necessary, repeat the steps above until your desired optimal ride quality has been achieved.

General Guidelines

- The rear shocks typically have the most influence on ride quality. This is due to your seating position being closer to the rear than the front.
- Adjustments to the front shocks will generally require 3-4 clicks in any direction to be noticeable, while adjustments to the rear shocks may only require 1-2 clicks to be felt.
- Don't be afraid to turn the knobs and experience the full adjustment range. You are not going to hurt anything and you can always go back if you adjust too far one way or the other.