

Installation instructions part# 87400
2007+ Tundra rear spring under kit
2007+ Tundra rear Jounce bump mounts
2007+ Tundra rear shock mounts

Spring install notes

1. Before the install begins you must record the stock pinion angle; to do this, park the vehicle on flat ground. Remove the four bolts (14mm head) that hold the driveshaft flange to the differential flange. Then separate the flanges and set the driveshaft aside. Using an angle finder on the differential flange record the degree on a piece of paper, you will need this number later in the install.



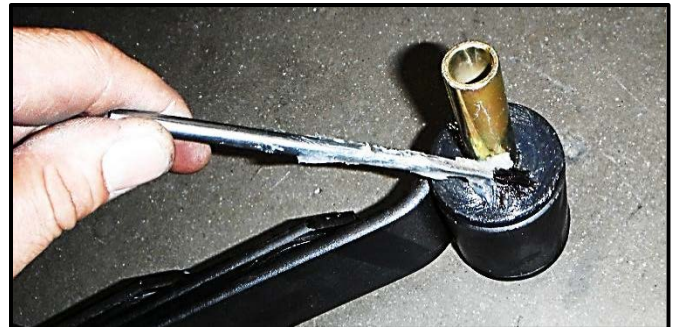
2. Chock the front wheels, jack up the rear of the vehicle and secure frame on jack stands.



3. Once the truck is on jack stands remove rear tires, rear shocks, rear springs, U-bolts shackles (support the axle housing with two more jack stands before removing springs, U-bolts and shackles), rear bumper, factory tow hitch, rear rubber brake lines, and cut exhaust. Also move parking brake brackets and ABS wiring out of the way.



4. Lubricate the spring bushings as well as the inside of the leaf springs then mount the springs to the front spring hanger and snug bolt.



5. Mount new shackles to upper shackle mount. With the springs under the rear end mount the new springs to the new shackles and snug bolts. (note: shackles angle back, see photo)



6. You will need to open up the radius of the new spring perch to fit the axle housing and add a slight angle to match the angle of the springs. The springs on the tundra taper inward towards the rear of the vehicle.



7. Remove the paint on the bottom of the axle housing where the new perches will be welded.

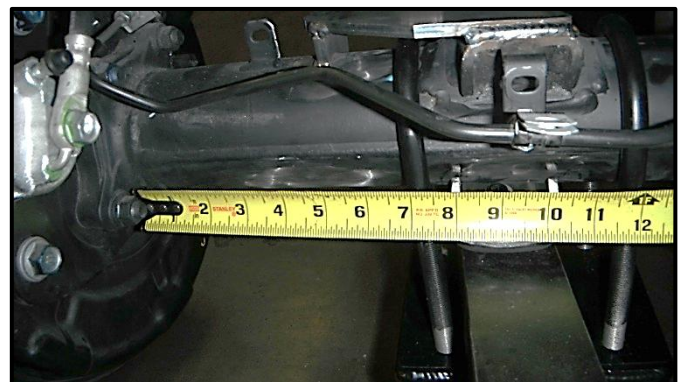


8. Set the new spring perches on top of the leaf springs with the leaf spring center pin going through the corresponding hole in the perch. Lower the axle housing into the radiuses of the new perches.

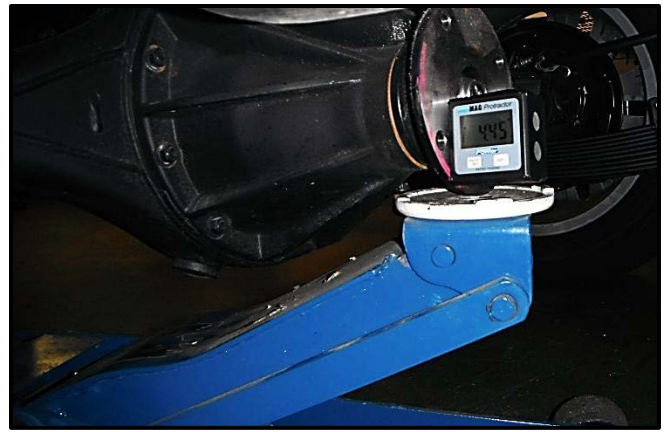


9. Install the new U-bolts and U-bolt plates then snug down U-bolts but do not tighten because the pinion angle still needs to be set.

10. Measure on each side, from the spring perch to the end of the axle backing plate and adjust side to side as necessary making sure the axle is centered in the vehicle.



11. Install the rear wheels and lower the truck back onto the ground under its own weight to set the pinion angle. Once the truck is at its new ride height, check the pinion angle with an angle finder and compare the new number to the stock number. If the pinion needs to go up use a floor jack underneath the u-joint flange and jack up slowly. If the pinion needs to go down use a dead blow hammer and tap the u-joint flange downward.



12. Once the pinion angle matches the stock angle, and the rear end is centered in the vehicle the new spring perches can be tack welded into place. Securely place the vehicle back on jack stands, remove the wheels, U-bolt plates, and U-bolts then fully weld the spring perch to the axle.



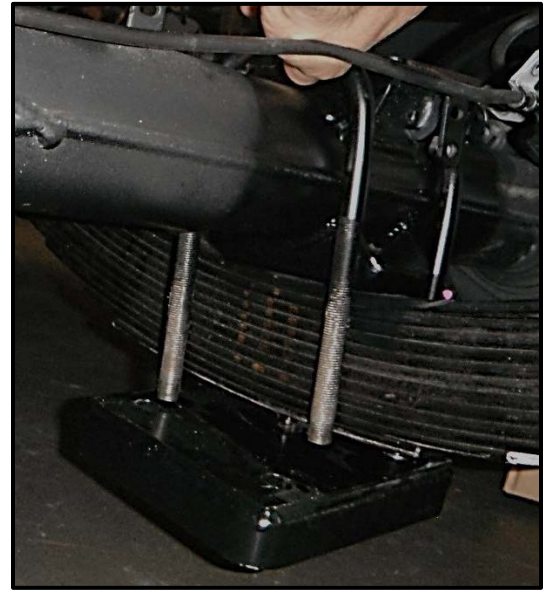
13. Install new brake lines and use manufactures specific bleeding procedures and recommended fluid.



14. Notch front side of sheet metal brace under the bed (see photo) for brake line clearance when suspension is fully compressed. (Note: if this is not done the brake lines will contact the brace causing damage and possible failure to the brake lines)



15. Once axle is cool, paint the new perches and re install the U-bolts and U-bolt plates and tighten.



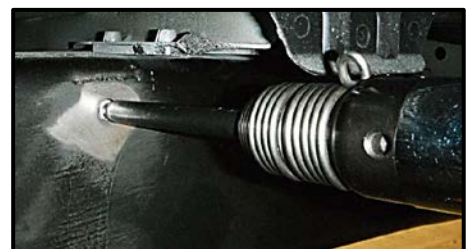
Jounce install notes

Once the spring under kit has been installed, the Jounce mount kit can be installed

1. Jack up the truck and support with jack stands on frame. Let suspension fully droop and remove tires.



2. Remove the 4 rivets holding the stock bump stop mount on frame. A disc cutter and air chisel/air hammer will be needed to remove rivets. Using the disc cutter, cut an X through the head of each rivet. Use the air chisel to knock each piece of the rivet head off. Remove the bracket and sand the remaining part of the rivet flush with the frame. Drill a small hole in the center of each rivet and use an air hammer to punch them through the frame. Once finished, clean and paint the frame to prevent rust behind the new bracket. (driver's side, remove nut in the center of the bump mount on the frame and zip tie the electrical box on the inside of the frame).



3. Install Jounce mount using the supplied 7/16" hardware



4. Thread Jounce extension onto the end of the Jounce shaft and tighten with a spanner wrench, then thread on and tighten the domed foot onto the Jounce extension.



5. Thread Jounce into the upper mount with a small amount of anti-seize on the threads of the Jounce can. Thread in by hand and hand tighten as much as possible then finish tightening with spanner wrench, also lock down the set screw.



6. Lay bump stop pads over the stock spring perch, once on position, before welding, mark the appropriate areas for paint removal.

7. Remove paint and place pads back onto the stock spring perches leaving a $\frac{1}{4}$ " of the factory spring perch exposed, this is where the bump pad will get welded to the spring perch.



8. Weld on the new bump pads and paint after cooling.



Rear shock mount notes

The Factory rear bumper must be removed for this installation. It can be remounted after the shock mounts are installed but the bumper brackets will need to be modified to fit with the new upper shock mounts, the brackets will also need to be trimmed for clearance with longer shackles used with the spring under kit.

1. Jack up the vehicle and support with jack stands on the frame remove the stock rear shocks, let the suspension fully droop and remove the wheels.
2. Once the rear shocks are removed you will need to cut off the factory upper shock mounts and sand the frame smooth.



3. The Total Chaos shock mount locates on the side of the frame utilizing the forward most bumper bracket hole. Using a bumper bracket bolt, mount the upper shock mount to the frame, the bolt will go through the hole in the mount then snug down to the frame.
4. Position the shock mounts so that the "point" of the shock mount is facing forward and is $\frac{1}{2}$ " below the top of the frame (refer to previous picture).



5. Trace the outline of the shock mount on the frame with a silver pencil, remove the mount and sand where the outline is to remove paint for welding.
6. Replace bracket onto frame in the correct position and tighten



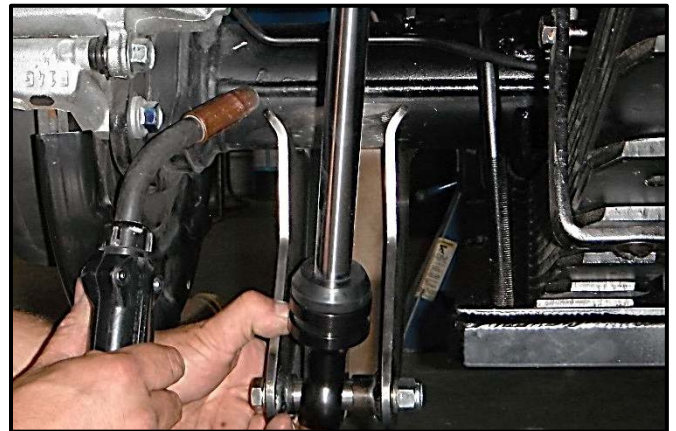
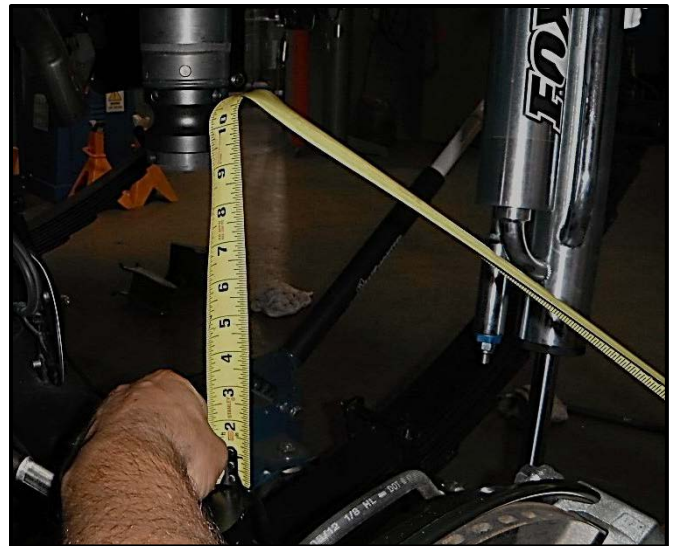
7. Weld all sides as well as top and bottom of the bracket, let cool and paint



8. Moving to the rear axle, you will need to cut off the factory lower shock mount.



9. Mount the shock to the upper shock mount and let the shock hang at full extension.
10. Bolt the supplied lower shock mount to the shock .
11. Using a jack, raise the axle until there is 9" of space between the bump pad on the axle and the bottom of the domed strike foot. (This will give 12" of travel due to the fact that the Jounce shock strokes 3".)
12. Swing the lower shock mount up to the axle housing. Measure from the axle housing flange to the outside of the lower shock mount and position the lower shock mount 2¼" from the axle flange.
13. Tack weld in place and remove the shocks, then weld both lower shock mounts, let them cool and paint.
14. Reinstall the shocks and charge with nitrogen to manufactures specifications.
15. Double check all the hardware that has been installed and tightened, reinstall wheels, and torque the lug nuts to manufactures specifications.



Part Number	Description	Quantity
07 Tundra/08 LC 200:40021	07+ Tundra U-Bolt Plate	2
07 Tundra/08 LC 200:49706	Spring Under Shackle	4
10618	Bolt, 14mm-1.5 x 140mm, GR. 10.9, Hex Head	2
10617	Bolt, 14mm-1.5 x 110mm, GR. 10.9, Hex Head	2
07 Tundra/08 LC 200:87401L	Rear Upper Shock Mount (Left)	1
07 Tundra/08 LC 200:87401R	Rear Upper Shock Mount (Right)	1
10060	Bolt, 1/2"-20 x 6" Grade 8	2
10037	Bolt, 1/2"-20 x 3.75" Grade 8	2
11001	Nut, 1/2"-20 Nylock	4
12003	Washer, 1/2" AN	8
07 Tundra/08 LC 200:87403L	Rear Upper Jounce Shock Mount (Left)	1
07 Tundra/08 LC 200:87403R	Rear Upper Jounce Shock Mount (Right)	1
07 Tundra/08 LC 200:87402L	Lower Rear Shock Mount (Left)	1
07 Tundra/08 LC 200:87402R	Lower Rear Shock Mount (Right)	1
10515	Bolt, 7/16"-20 x 1.50" Grade 8	8
11501	Nut, 7/16"-20 Nylock	8
12503	Washer, 7/16" AN	16
07 Tundra/08 LC 200:87404L	Rear Lower Jounce Strikepad	1
07 Tundra/08 LC 200:87404R	Rear Lower Jounce Strikepad	1
59401	Axle Perch	1
92330	Brakeline, 2wd Balljoint 18"	1
86205	Jounce Shock 1.5" Shaft Extension	2