

SECOND GEN NISSAN FRONTIER (05-19) REAR AXLE FLIP KIT INSTALLATION INSTRUCTIONS



INSTALLATION INSTRUCTIONS

Rev - - Apr 2024

!!NOTICE!!

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!!WARNING!!

THE USER OF THIS PRODUCT ASSUMES ALL LIABILITY FOR ANY DAMAGES TO PERSONAL OR PUBLIC PROPERTY RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT. ANY INJURIES SUSTAINED BY THE USER AND/OR ANY OTHER INDIVIDUALS ARE ALSO THE SOLE RESPONSIBILITY OF THE USER. MOTORSPORTS ACTIVITIES ARE INHERINTLY DANGEROUS AND LOJ CONVERSIONS CORP CAN NOT BE HELD RESPONSIBLE FOR ANY INCIDENTS RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT.

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BEFORE YOU BEGIN:

Please ensure that all of the components required for your installation have been included in your package. The Rear Axle Flip Kit should include the following components:

- Rear Axle Saddles (Will be marked with an "M" or "C", M = M226, C = C200K, verify correct saddles were provided)
- Rear Axle Saddle Cap with Bump-Stop Pre-Installed
- Rear Axle Lower Spring Plate
- Qty. 2 Rear Leaf Spring Pins and Nuts
- Qty. 4 Rear Axle Saddle Cap Shims
- Qty. 4 Rear Axle U-Bolt Assemblies



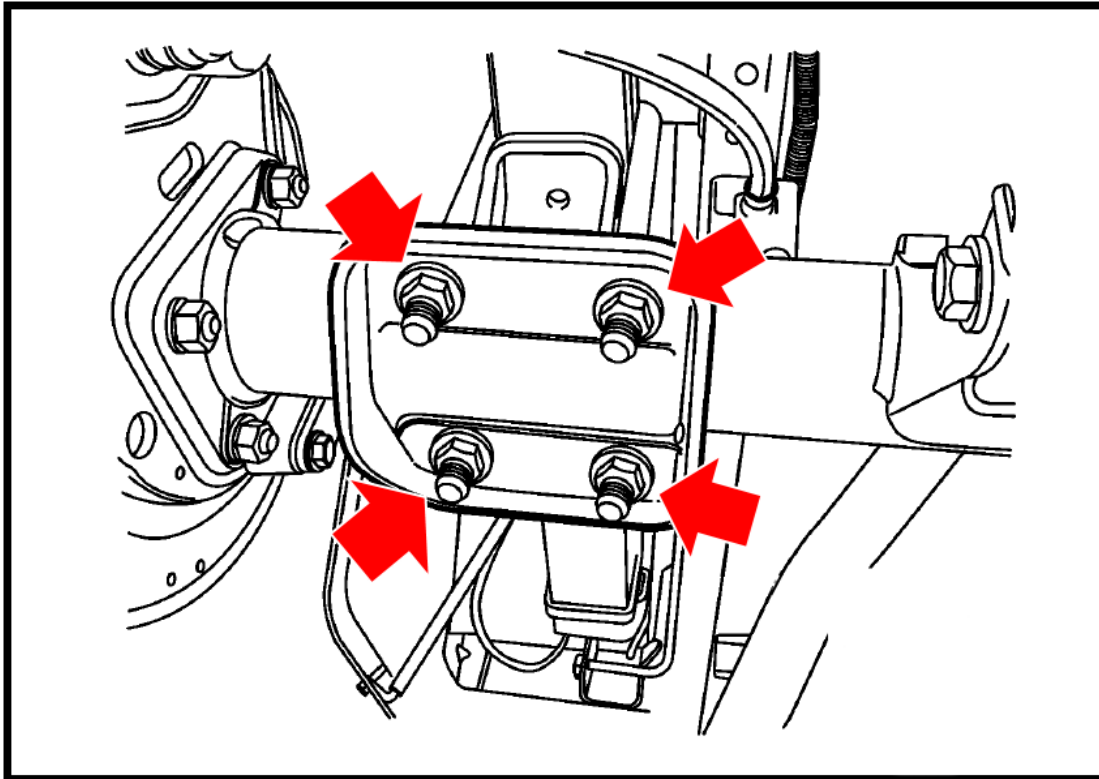
Ensure you are working on your truck in a safe manner. All work should be performed on a level stable surface, either concrete or asphalt, by a qualified automotive technician.

WARNING: When removing suspension components from a vehicle, be sure to remove as much preload as possible. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

Products that are used, installed or modified in any way are not eligible for return.

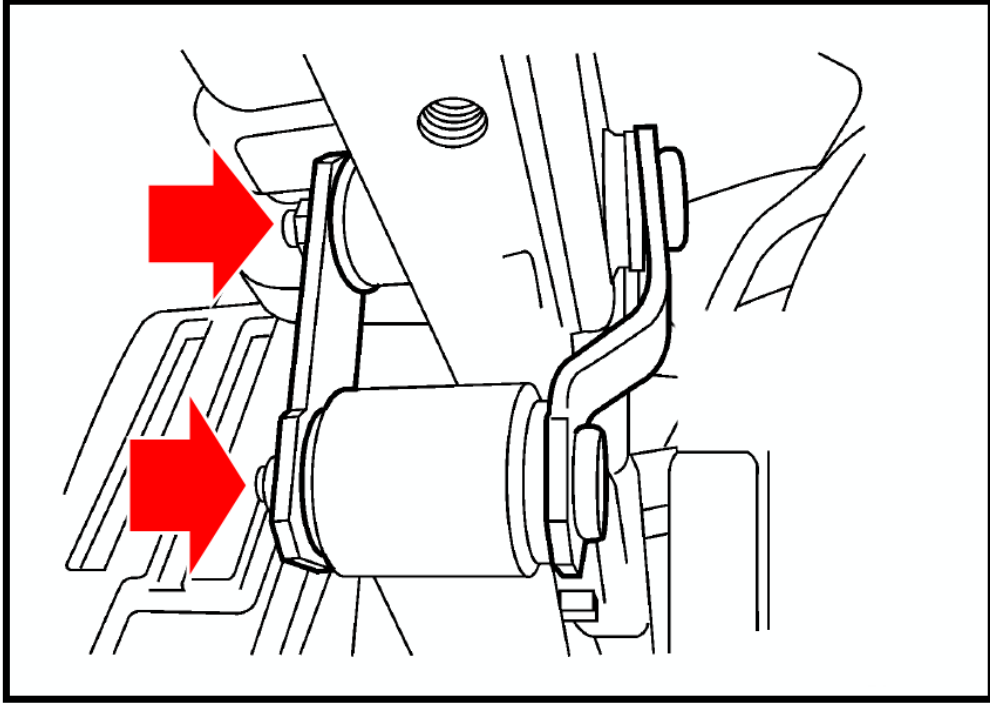
INSTALLATION PROCEDURE:

- 1) With the frame supported on jack stands and the axle at full droop, support the axle under the center differential with a floor jack.
- 2) Loosen all U-Bolts holding the axle to the leaf springs, but do not remove completely. The U-bolts should be loose enough to allow the axle to rotate slightly.
- 3) Remove both rear shocks.

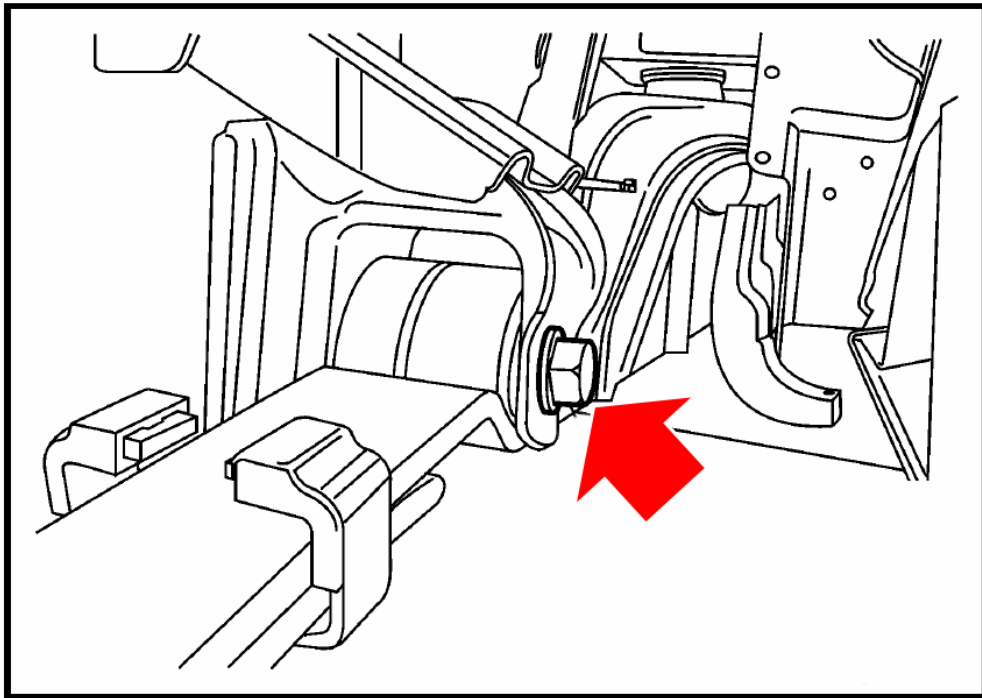


The following steps pertain to one side of the vehicle, repeat steps for the other side.

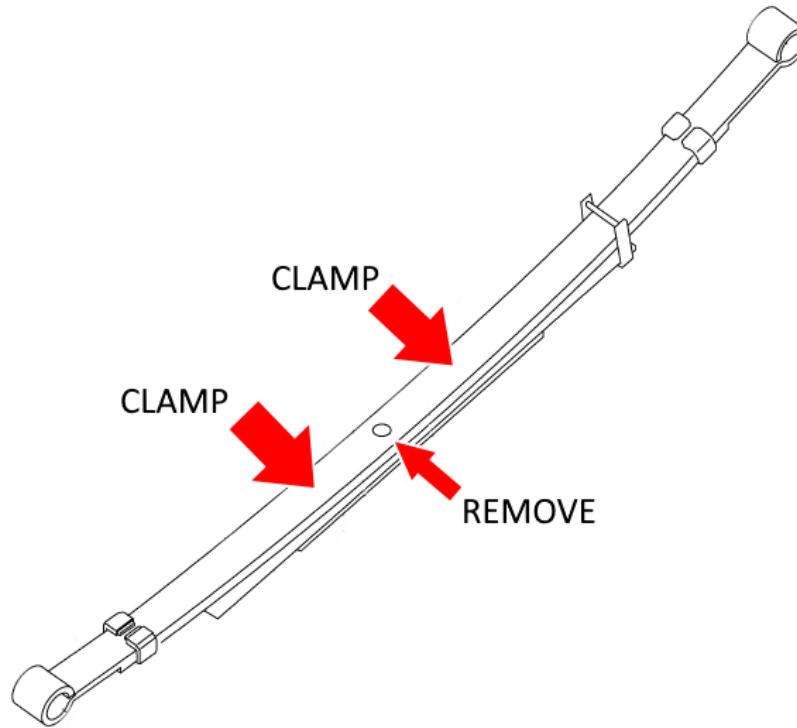
- 4) Remove the factory U-bolts that hold the axle to the leaf spring.
- 5) Remove the rear leaf spring shackle from for the spring and the frame.



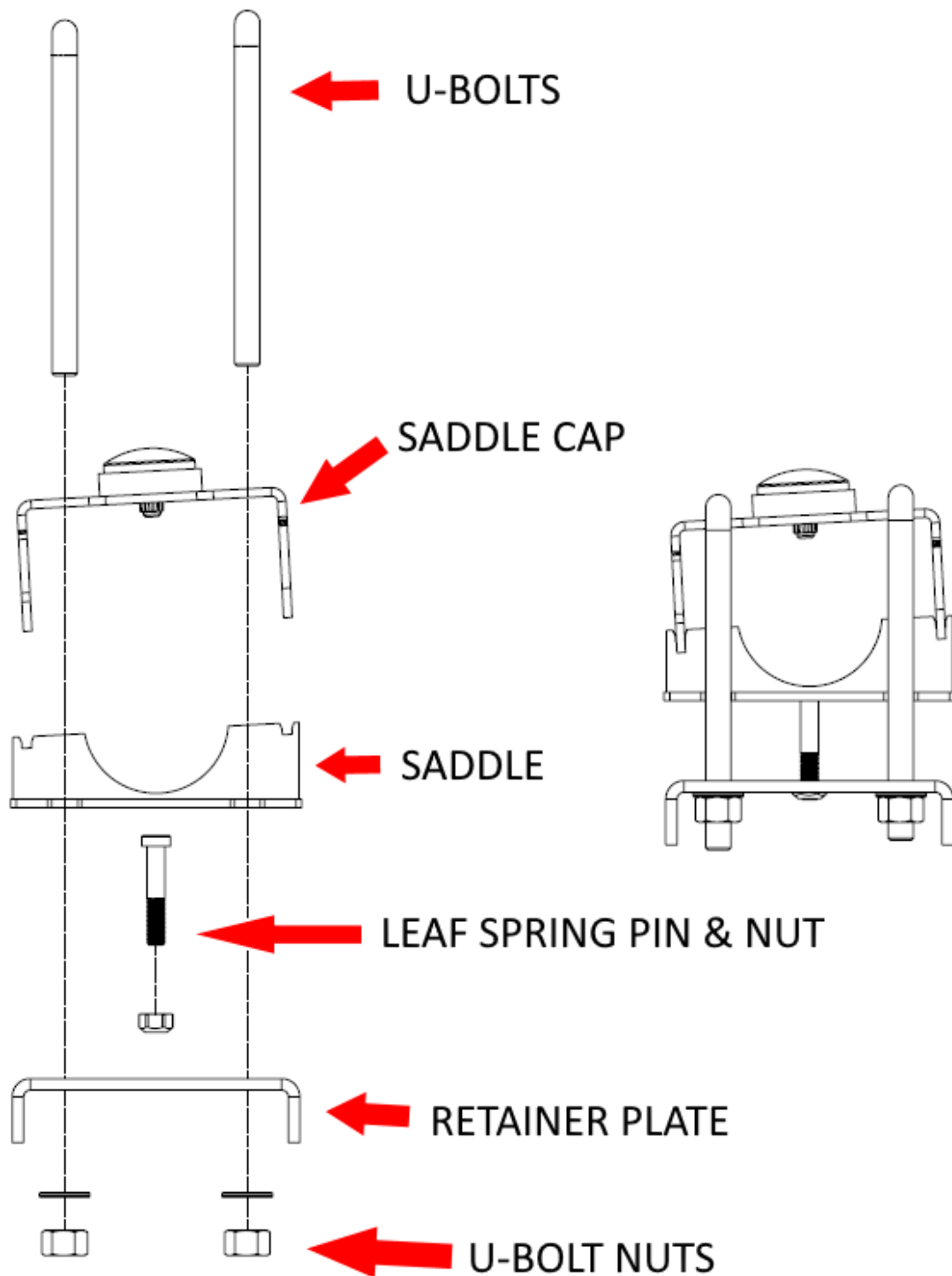
- 6) Remove the forward leaf spring mount bolt.



- 7) Remove the leaf spring from the vehicle. The factory bump stop will come out with the spring pack and can be discarded.
- 8) Using clamps in two places on the leaf spring (in front of and behind the middle of the spring), clamp the leaf spring pack together.
- 9) Remove the factory pin and nut in the center of the leaf spring pack. Depending on age or corrosion, this may need to be cut out.



- 10) Install the supplied low-profile socket head shoulder bolt and nut into the leaf spring in the opposite direction from the pin and nut that were removed. The head of the bolt should be on top of the spring pack and the nut should be on the bottom. Tighten this bolt to **55 ft-lb**.
- 11) On the front of the factory leaf spring perch on the axle, there is a small bracket holding the ABS wheel speed sensor cable. Remove the cable from the bracket and cut the bracket off of the axle spring perch.
- 12) Jack up the axle to raise the side you're working on 4-5 inches.
- 13) Reinstall the leaf spring under the axle with only the front mount bolt. Leave this bolt loose.
- 14) See flip kit Exploded View on the following page as a reference for the following steps.**



- 15) Place the axle flip kit saddle on top of the leaf spring. There is a small V-shaped cut on the base of the saddle, this should be facing forwards. The center of the saddle will locate itself on the pin you installed into the leaf spring pack.

- 16) Raise the leaf spring up to meet the bottom of the axle.
- 17) Place the saddle cap on top of the axle. The angle of the cap will not perfectly match the axle leaf spring perch, this is because the lower saddle is designed to correct the pinion angle change resulting from flipping the axle and relocating the rear leaf spring mount with the supplied lift shackles.
- 18) Install the lower leaf spring retainer plate and Axle U-Bolts but do not tighten.

Repeat steps 4-18 on the other side of the vehicle.

- 19) Now that the axle has been flipped to the top of the leaf springs, the leaf springs are back in place, and the axle is properly supported, we can finalize the installation of the saddle/cap assembly on the axle flip kit.
- 20) Rotate the axle in the lower saddle to allow the cap assembly to fully seat into the saddle and be parallel with the axle spring perch. You should end up with a small gap between the cap assembly and the spring perch on the axle. Use the supplied shims to check and set this gap. The appropriate gap will be less than the thickness of two shims. Add shims until the gap is less than two shims thick. **YOU SHOULD HAVE A GAP, THIS IS NORMAL.**
- 21) If the gap is abnormally large, check to make sure the keys on the cap are aligned and seated with the receiver grooves on the saddle. These parts were shipped assembled and are designed to seat together. If you can't get them to seat together over the axle, or you have no gap at all between the cap and the axle spring perch, you may have the wrong saddle for your axle. The M226 and C200K have different axle tube diameters and the saddle is different for each axle type.
- 22) Once you have established the proper gap, tighten the U-Bolt nuts in a crisscross pattern. This will cause the cap assembly to deform/crush and the gap to close between the cap assembly and the axle spring perch. Torque the U-Bolt nuts to **93 ft-lb. RETORQUE AFTER TEST DRIVE AND AFTER 100 MILES OF DRIVING**
- 23) Torque the Front Leaf Spring Mount Bolt to **93 ft-lb.**
- 24) Torque the Upper Shackle Mount Bolt to **100 ft-lb.**
- 25) Reinstall your shocks.
- 26) Torque upper shock mount nuts to **33 ft-lb.**
- 27) Torque lower shock mount bolt/nut to **148 ft-lb.**

Test Drive

Take the truck for a short test drive and then recheck all fasteners for proper torque. After 100 miles of driving, recheck torque a second time.

Your installation is complete, enjoy!!!