

CS-FPSKIT-3X2: Ford Pinion Shim Kit, 2°

Note

Please review the product instructions prior to attempting installation to ensure installer is equipped with all tools and capabilities necessary to complete the product installation. We recommend thoroughly reading the instructions at least twice prior to attempting Installation.

Before beginning disassembly of the vehicle, check the "What's Included" section of the instructions to ensure you've received all parts necessary to complete installation. Further, verify that the parts received are PROPER TO YOUR application (year range, motor, etc.) to avoid potential down-time in correcting potential discrepancies. Any discrepancies will be handled by Carli Suspension and the correcting products will be shipped UPS Ground.

Parts Checklist

	(Qty. 2) - 3"	Wide.	2°	Pinion	Shims .	Zinc	Plated
--	---------	--------	-------	----	---------------	----------------	------	--------

☐ (Qty. 2) - Ford Center Pin & Nut, 7/16" x 8"

Instructions

- 1. Your leaf springs will need to be separated from your axle to install these shims. If your leaf springs are currently installed, you'll need to jack up the rear end and set the axle on jack stands.
- 2. Support your pinion and remove your U-Bolts and upper U-bolt plate from the leaf springs.
- 3. Lift the rear of the truck to create separation between the leaf springs and axle perch.
 - 4. Use a C-Clamp on each side of the center pin to hold tension on the leaf springs; you'll want these pretty tight as they'll hold the assembly together when the center pin is removed and you DO NOT want these shifting. Also, ensure you clamp far enough away from the center pin that you have adequate room to install the shim. If you clamp too close together, your shim will hit the clamps.



5. With the leaf springs clamped and shim tested to fit between the clamps, remove the center pin. This will take Vice grips on the head of the center pin and an 11/16" socket on Carli Leaf Springs Shown.



6. With the nut removed, pull the center pin. It will likely be under some tension—we use a long, thin punch to push it out. We drive the 7/16" punch all the way into the pack to ensure the leaf springs are aligned for the new center pin. The head on the new center pin is round so you can't use a socket to "thread" it in. Aligning with the center pin will ensure you DO NOT damage the threads as you install it.



- 7. Insert the new center pin into the pinion shim and push it through the pack. If it doesn't go through by hand, use a dead blow mallet to GENTLY coerce it through. If it binds, pull it out and realign the leaf springs with the punch to avoid damage to the threads.
- 8. Ensure the shim is indexed properly; thickest portion to the rear, thin to the front to tilt the pinion slightly upward. Thread the nut to the top of the center pin by hand.



Front

- 9. Cut off the excess center pin length so you can tighten the nut with a socket.
- 10. These do not require torquing. As the leaf springs are still held together with the C-Clamps, you need to snug these, then put another turn or two so they're under tension. If the leaf springs separated, you'll need to tighten the center pin with a ratchet until there's no gap between the leaf springs at the center of the pack, then put another turn or two.
- 11. With the shims installed and center pin tight, you can remove the C-Clamps and reassemble the axle to the leaf pack.
- 12. Lower the truck to seat the center pin head in the axle index.
- 13. Place the u-bolt plate to the top of the springs and install the U-Bolts. If you're using Carli U-Bolts, torque in a cross pattern to 110lb/ft.

