

#C6159 Installation Instructions 1999-2008 Chevy/GM 1/2 Ton Pickup Rear Add-A-Leaf

Read and understand all instructions and warnings prior to installation of product and operation of vehicle.

Zone Offroad Products recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known. Minimum tool requirements include the following: Assorted metric and standard wrenches, hammer, hydraulic floor jack and a set of jack stands. See the "Special Tools Required" section for additional tools needed to complete this installation properly and safely.

>>> PRODUCT SAFETY WARNING

Certain Zone Suspension Products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. Zone Offroad Products does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

Difficulty Level

easy 1 (2) 3 4 5 difficult Estimated installation: 1-2 hours

Special Tools Required

8" or larger C-Clamp (2)

>>> Pre-Installation Notes

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- 2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- 3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- 4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- 5. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
- 6. If installation is to be performed without a hoist, Zone Offroad Products recommends rear alterations first.
- 7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

Kit Contents

Qty

- Part 2 Add-A-Leaf
- 2 3/8" x 4-1/2" Center Pin
- 4 Spring Clamps
- Aluminum Leaf Shim Plate

Important Verify you have all of the kit components before beginning installation.

INSTALLATION INSTRUCTIONS

>>> Pre-Installation Notes

- This instruction sheet outlines the complete installation of this add-a-leaf kit 1. from beginning to end. If installing this kit as an accessory to a Zone Offroad Products suspension system skip ahead to step #9.
- 2. This add-a-leaf kit does not come with replacement u-bolts. Zone Offroad Products highly recommends replacing u-bolts whenever they are removed. If installing this kit along with a Zone Offroad Products suspension lift, the u-bolts provided with the lift will work with this add-a-leaf kit. If u-bolts are needed, check the Zone Offroad website for a complete listing of replacement u-bolts.

>> ADD-A-LEAF INSTALLATION

- Park the vehicle on a clean. flat surface and block the front wheels for safety.
- 2. Raise the rear of the vehicle and support with jack stands under the frame rails, just ahead of the front leaf spring hangers.
- Remove the wheels. 3.
- Support the rear axle with a hydraulic jack under the differential. Disconnect 4. the rear shocks from the axle.
- 5. Disconnect the parking brake cable brackets (2) from the driver's side frame rail Figure 1. Save all hardware.



Figure 1

Disconnect the factory brake line bracket attached to the top of the driver's side 6. frame rail Figure 2. Remove the two bolts and pull the bracket off the top of the frame and set it under the top edge. Save hardware.



Figure 2

COMPLETE THE FOLLOWING STEPS ON ONE SIDE AT A TIME, STARTING WITH THE PASSENGER'S SIDE.

- 7. With the axle still well supported, remove the passenger's side u-bolts. Set the hardware and factory u-bolt plate off to the side.
- 8. Lower the axle away from the spring.
- 9. Fasten a C-clamp on each side of the leaf spring center pin. With the clamps in place, remove the center pin and discard.
- 10. Slowly release the C-clamps and allow the spring to come apart. Be sure to keep the spring leafs in order and oriented correctly.
- 11. Place the new provided add-a-leaf and aluminum shim plate between the factory lower flat leaf and middle leaf. Slide the new center pin up through the lower flat leaf, add-a-leaf and top two factory leafs. Start the nut on the center pin to hold the pack together but do not use the center pin to pull the leafs together.
- 12. Place the C-clamps back on the leaf pack on each side of the center pin Figure 3. Slowly pull the leaf pack together with C-clamps, make sure the leafs stay in line and the center pin is square. When the pack is completely together, torque the center pin to 30 ft-lbs. Remove the C-clamps.

Step 9 Note

If installing this kit with a Zone Offroad suspension system follow steps 9-14 in conjunction with the instruction included with the suspension system

Step 11 Note

It may be necessary to use the C-clamps to slightly compress the pack before installing the center pin.



Figure 3

- 13. Raise the axle back up to the leaf pack and align the center pin with the hole in the axle mount. Install the u-bolts along with the factory u-bolt plate. Snug u-bolts be do not tighten.
- 14. Repeat the add-a-leaf install procedure on the driver's side.
- 15. Once both sides are complete, reattach the shocks to the axle with the original hardware. Torque bolts to 70 ft-lbs.
- 16. Reattach the brake line bracket to the top of the driver's side frame rail with the original bolts. Tighten bolts securely.
- 17. Reattach the parking brake brackets to the driver's side frame rail. Torque bolts to 25 ft-lbs.
- 18. Install the wheels and lower the vehicle to the ground. Torque wheel nuts to 140 ft-lbs.
- 19. Bounce the rear of the vehicle to settle the suspension. Torque the u-bolts to 90 ft-lbs.
- 20. Check all hardware for proper torque.
- 21. Check all hardware after 500 miles.

>>> Post-Installation Notes

- 1. This add-a-leaf kit will require some break-in time. Over approximately the first 100 miles the leaf will settle slightly in both height and stiffness. After the first 100 miles, retorque the u-bolts.
- 2. This add-a-leaf will generally net 1" to 1-1/2" of lift, depending on the condition of the factory springs.