

C1240 Installation Instructions 2023-24 Chevy Colorado ZR2 2023-24 GMC Canyon AT4X 2" Strut Spacer and Perch Collar Lift Kit

# 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.

## >>> TECHNICAL SUPPORT

Live Chat provides instant communication with Zone tech support. Anyone can access live chat through a link on www.zoneoffroad.com.

www.zoneoffroad.com may have additional information about this product including the latest instructions, videos, photos, etc.

Send an e-mail to tech@zoneoffroad.com detailing your issue for a quick response.

888.998.ZONE Call to speak directly with Zone tech support.

## >>> Pre-Installation Notes

- 1. 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.

# **Difficulty Level**

easy 1 (2) 3 4 5 difficult

Estimated installation: 2 hours

# **Special Tools Required**

CH-42188-B - Ball Joint Separator

#### **Tire/Wheel Fitment**

285/75R17 – Stock Backspacing

295/70R17 – Stock Backspacing

305/70R17 - Stock Backspacing

285/60R20 - 5" Backspacing, 20x9 Wheel

305/55R20 - 5" Backspacing, 20x9 Wheel

- 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.

# **IMPORTANT**

It is required that ride height measurements be taken before and after installation. Measure from the **WHEEL AXLE CENTER** up to the **FENDER LIP** of the wheel opening. Do this for all 4 wheels. Record measurements below.\*\*

## **BEFORE:**

<i>LF</i>	<i>RF</i>	<i>LR</i>
RR		

## **AFTER:**

*LF\_\_\_\_\_ RF\_\_\_\_ LR\_\_\_\_\_ RR* 



\*\*These ride heights will be required if you have any ride height concerns after installation. Please be prepared to provide these to Technical Support.

## INSTALLATION INSTRUCTIONS

#### **Pre-Installation**

- 1. Park vehicle on clean and level surface. Block the rear wheels for safety.
- 2. Measure the ride height of the vehicle from the center of the wheel to the fender and record.

#### **DISASSEMBLY INSTRUCTIONS**

- 1. Raise the front of the vehicle with a hydraulic jack. Support the frame rails with jack stands and allow the front suspension to droop.
- 2. Remove the front wheels.
- 3. Remove the nut from the sway bar links attaching it to the steering knuckle. Remove the sway bar link stud from the steering knuckle. Save nut for later installation Figure 1



Figure 1

Perform the following installation steps on one side at a time.

4. Disconnect the ABS wire from steering knuckle and upper control arm to gain additional slack. Retain OE hardware from the steering knuckle for later installation Figure 2



Figure 2

## **Kit Contents**

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

beginning installation.			
Qty	Part		
2	Strut Spacer		
2	Perch Collar Spacers		
1	Bolt Pack		
	6	10mm Flange Nut	
2	1" Lift Block		
2	3/8" Center Pins		
4	9/16" x 8-3/4" U-Bolts		
1	Bolt Pack		
	8	9/16" Nuts	
	8	9/16" Washers	

 Disconnect the three ABS wire mount clips from the upper control arm completely in order to gain additional slack to remove the strut assembly. The ABS wire will need to remount to these wire mount clips. Figure 3



Figure 3

6. Remove the tie rod nut nut and thread it on until flush with the end of the ball joint. Use a CH-42188-B - Ball Joint Separator to separate the outer tie rod from the steering knuckle Save nut for later installation. Figure 4



Figure 4

7. Remove the upper ball joint nut and thread it on until flush with the end of the ball joint. Using a CH-42188–B - Ball Joint Separator, separate the upper control arm from the steering knuckle Disconnect the ball joint and allow the knuckle to swing rearward out of the way. Save nut for later installation Figure 5, 6



Figure 5



Figure 6

8. Disconnect any wire harness retainers from the upper strut mount nuts. Support the lower control arm with a hydraulic jack and remove the 3 upper nuts holding the top of the strut to the frame mount. DO NOT remove the center nut on the strut. Discard nuts, these will not be re-used. Figure 7, 8, 9



Figure 7

# **Step 8 Note:**

If needed, the fender liner may need to be removed for easier access to the three strut mount nuts...



Figure 8

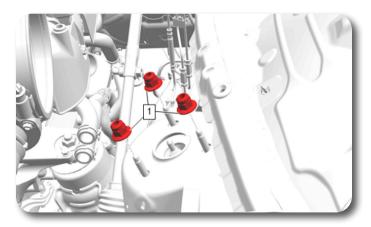


Figure 9

9. Remove the two lower strut bolt. Save hardware for later installation Figure 10



Figure 10

10. Using the jack, lower the control arm and knuckle enough to remove the strut, being careful not to overextend any lines or the CV shaft..

# If needed, remove the nut attaching

**Step 10 Note:** 

the CV shaft.

## STRUT SPACER AND PERCH COLLAR INSTALLATION

Mark the strut upper mount to coil spring and coil spring to strut for orientation when re-assembling the strut. Figure 11



Figure 11

12. Using a strut compressor, compress the coil spring and remove the upper strut mount center nut. Disassemble the strut to the point as shown in the figure below. Figure 12, 13



Figure 12



Figure 13

13. Remove the strut seal dust cap and lower spring seat. Figure 14, 15



Figure 14



Figure 15

14. Install the lower spring seat perch collar onto the strut. Figure 16



Figure 16

15. Re-install the lower spring seat on top of the perch collar and the strut seal dust cap. Re-assemble the strut using the factory upper spring mount lining up the marks made in the previous step. The strut will be re-assembled indentical to a stock strut with the perch collar spacer in the shown location. Figure 17



Figure 17

16. Install the strut spacer onto the factory upper strut studs. Figure 18



Figure 18

## **S**TRUT **I**NSTALLATION

17. Loosely re-install the strut with strut spacer to the frame with the provided 10mm locking flange nuts. Figure 19



Figure 19

18. Raise the lower control arm and re-install the lower strut bolts. Tighten the two lower strut bolts to 37 ft-lbs. Figure 20



Figure 20

- 19. Torque the upper strut mount nuts to 39 ft-lbs.
- 20. Re-connect the upper ball joint to the steering knuckle. Torque the upper ball joint nut with a first pass to 30 ft-lbs and a final pass of 60-75 degrees. Figure 21

# **Step 17 Note:**

The 10mm hardware in in bolt pack 455.



Figure 21

21. Re-connect the tie rod to the steering knuckle, Torque the tie rod nut with a first pass to 26 ft-lbs and a final pass of 90-105 degrees. Figure 22



Figure 22

- 22. Complete the strut spacer installation procedure on the other side.
- 23. Reattach the sway bar links to the steering knuckles and tighten the nut to 118 ft-lbs.
- 24. Re-install the brake line brackets and ABS wire clips to the upper control arm.
- 25. Reattach the ABS wire mount to the steering knuckle and torque to 80in-lbs.
- 26. Install the tires and lower the vehicle to the ground, bounce the front end to settle the suspension.

#### **REAR INSTALLATION**

- 1. Block the front tires.
- 2. Raise the rear of the vehicle with a hydraulic jack. Support the frame rails with jack stands and allow the rear suspension to droop.
- 3. Remove the rear wheels.

Perform the following installation steps on one side at a time.

4. Remove the lower shock bolt. Save hardware for later installation. Figure 23



Figure 23

- 5. Remove the four U-bolt nuts and remove the U-bolts from the vehicle. The OE U-bolts and nuts can be discarded.
- 6. Place a C-clamp on either side of the center pin, clamping all leaves together.
- 7. Loosen the top center pin nut and lower the axle enough to remove the factory center pin.
- 8. Place the provided 1" block on the bottom of the leaf pack and insert the new 3/8" center pin first through the block, then through the leaf pack.
- 9. Tighten the center pin nut to 20 ft-lbs.
- 10. Remove the C-Clamps.
- 11. Fasten the entire assembly with the provided u-bolts, high nuts and washers. Snug but do not torque the u-bolts at this time.
- 12. Repeat block installation of the driver's side. Take care not to over extend the brake lines
- 13. Reinstall the OE shocks to the lower shock mount using the OE hardware. Torque the lower shock hardware to 118 ft-lbs.
- 14. Install the tires and lower the vehicle to the ground, bounce the rear end to settle the suspension.
- 15. Torque the U-bolt nuts to 100-120 ft-lbs.

## **Post Installation**

- 1. Check all hardware for proper torque.
- 2. Check hardware after 500 miles.
- 3. Adjust headlights.
- 4. A front end alignment must now be performed to original equipment specifications.

# Step 12 Note:

The rear axle may need to be raised up to attach the shocks to the axle.

# Post-Installation Warnings

- 1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
- 2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/replacement may result in component failure.
- 3. Perform head light check and adjustment.
- 4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.