

# C1351 Installation Instructions 2014 Chevy/GMC, ½ Ton, 2/4wd 3.5" Combo 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

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

Send an e-mail to *tech-zone@ridefox.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.
- 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.

# **Difficulty Level**

Easy 1 (2) 3 4 5 difficult

Estimated installation: 4-6 hours

# **Special Tools Required**

Reciprocating Saw

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

Tire:

33x12.50

Wheel:

Stock Backspacing

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

#### **Kit Contents**

Qty Part

2 Strut Spacer

1 Bolt Pack 646 - Strut Spacer

4 7/16"-14 x 3-1/2" bolt

4 7/16"-14 lock nut

8 3/8" USS flat washer

16 1.5" x 3" Body Block

2 Steel Bed Spacers

1 Front Bumper Bracket - DS

1 Front Bumper Bracket - PS

2 Nut Tab

1 Ground Strap Extension

1 Loctite

1 Rear Bumper Bracket - DS

1 Rear Bumper Bracket - PS

1 Rear Bumper Step Spacer

1 Bolt Pack 245 - Body Lift

Qty Part

2 14mm-2.00 x 150mm bolt

2 12mm-1.75 x 150mm bolt

4 14mm-2.00 x 170mm bolt

6 12mm-1.75 x 70mm bolt

4 .25" x .7" ribbed shank clip

6 7/16" USS flat washer

2 10mm x 1.50 lock nut

2 3/8 USS flat washer

2 14mm x 2.00 prevailing torque nut

2 9/16 SAE flat washer

2 1/4"-20 x 1" self tapping bolt

4 7/16"-14 x 1" bolt

8 7/16" USS flat washer

4 7/16"-14 flange lock nut

1 1/4"-20 nylock nut

4 1/4" External serrated edge washer



#### **INSTALLATION INSTRUCTIONS - 1.5" BODY LIFT**

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Remove the negative battery cable first, then the positive battery cable. If equipped, the Supplemental Restraint System (air bags) will be deactivated when the battery is disconnected.
- 3. Measure and record the space between the front bumper and the body as well as the cab to the bed for reference during the installation.

#### **FRONT**

#### >> FRONT DISASSEMBLY

 Remove the 12 plastic retaining clips holding the upper core support cover to the core support Figure 1. Pull up on the center of the clips to unlock and then pull them out of the cover. Save the cover and clips.



Figure 1

2. Remove the 4 bolts mounting the top of the grill to the core support. Figure 2 Release the clips holding the top of the grill in place by gently pulling out on the top of the grill.



Figure 2

# **Step 3 Note**

GMC models will require the 2 forward most fender flare bolts to be removed to gain access and remove the front valance.

3. Using a 7mm socket, remove the two bolts attaching the lower grill valence to the inner fender well on both sides. Figure 3

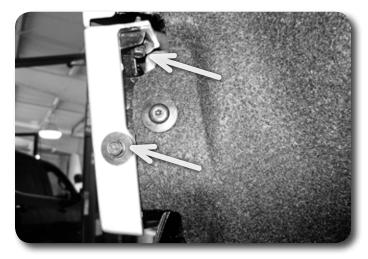


Figure 3

4. Remove the six clips holding the grill valence to the grill from the inside. Figure 4

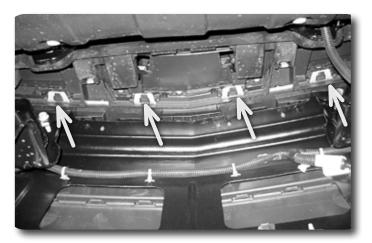


Figure 4 - 4 of 6 clips shown

- 5. With the clips released, the valence can now be removed. Pull out at the fender well and gently remove the valence from the of the truck.
- 6. With the valence removed, the 4 lower grill mounting bolts are accessible. Remove these bolts and remove the grill from the vehicle. Figure 5

# **Step 5 Note**

The grill and valance can also be removed as an assembly if the bolts shown in step 6 are removed from the inside first.



Figure 5

7. Disconnect the main fog light wiring connector. Figure 6



Figure 6

8. Disconnect the outer bumper supports from the bumper and frame Figure 7. Save hardware and supports.

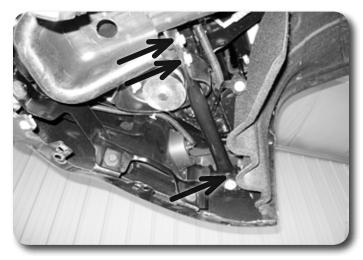


Figure 7

9. Remove the four bumper bolts that mount the bumper to the frame brackets. Figure 8 Remove the bumper from the vehicle.



Figure 8 - Pass. Side Shown

10. Make a small mark on each tow hook to indicate which side is up. Remove the tow hooks from the frame by removing the two (per hook) mounting bolts and plastic/foam covers. Figure 9 Save the mounting hardware and hooks.

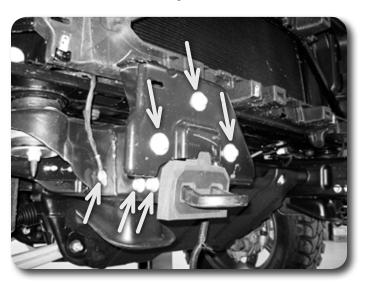


Figure 9

- 11. Note the orientation and remove the factory front bumper brackets from the frame horns Figure 9. Save all hardware.
- 12. Disconnect the ground wires from the passenger and driver side front body mounts brackets as well as the passenger side front cab mount. Figure 10. Save bolts.



Figure 10 - Pass. Front Cab Mount Shown

13. Check for any other wires, hoses, etc that may not have enough slack for 1.5" of body lift. Disconnect or reroute these parts as necessary.

#### >> CAB LIFT

- 14. Loosen but do not remove all of the cab mount bolts. The front bolts run from the top down through the core support and are attached with a nut. The remaining bolts run from the bottom up into captive threads in the cab.
- 15. Remove the passenger's side cab (3) and core support (1) bolts. Remove the large factory washer for re-use on the new bolts. The front core support bolt needs to be pushed up into the core support and removed.
- 16. Using a hydraulic jack and block of wood, slowly lift the passenger's side of the cab. Continuously watch for lines, hoses, etc to be sure none are overextended. Lift the cab just enough to place the provided lift blocks between the body and the frame body mounts. Install the provided 1.5" tall blocks in the 3 cab mounts and core support mount.
- 17. Install 14mm x 170mm bolts at the 2 rear most cab mount positions with the large factory washers. Install the provided nut tab into the factory core support mount making sure it is seated similar to the factory bolt tab. Install 14mm x 150mm bolts with the large factory washers at the front cab mount and 12mm x 150mm bolts at the core support. Leave hardware loose.
- 18. Repeat the lift procedure on the driver's side.
- 19. With the cab lifted, go back and remove each bolt and apply Loctite to the threads. Ensure the body is square on the frame. Torque all 14mm body mount hardware to 95 ft-lbs and the two front 12mm bolts to 65 ft-lbs.

## >> FRONT ASSEMBLY

20. Install the ground strap extension on the body mount with factory hardware and attach wire to bracket with 1/4" nut & washer. Use serrated edge washer as shown to bite into the strap. Failure to do so may result in a poor ground. Tighten to 10 ft-lbs. Figure 11

# Step 15 Note

The head of the bolt has a tab to keep it from turning when tightened. The bolt may need to be rotated before it will push up and out of the core support.

#### Step 17 Note

All body/bed mount hardware is located in hardware pack #245



Figure 11

- 21. Reattach the ground wires that were removed from the front body mounts **Figure 9** below the core support. Torque bolt to 15 ft-lbs.
- 22. Locate the factory tow hook mount holes in the front of the frame rails. The driver's side of each frame rail will only have one tow hook hole. Measure straight back from the center of the existing hole 1-7/16" and mark. Figure 12 Drill a 1/2" hole at the mark (one hole per frame rail).

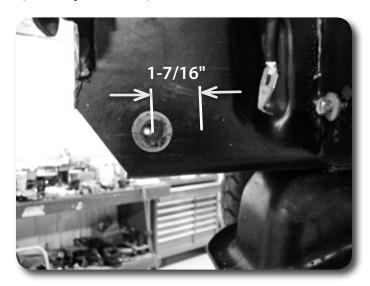


Figure 12

23. It is necessary to cut the front bumper frame mounts to provide clearance for the bumper in its raised position. Make a cut line even with the top of the lower weld nuts as shown in Figure 13. Using a suitable cut off tool, cut at the mark and down flush with the side of the frame.

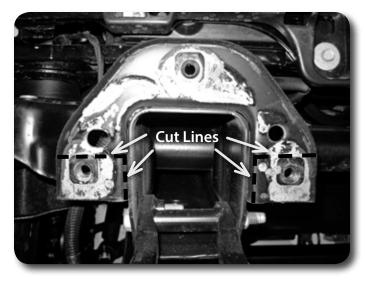


Figure 13

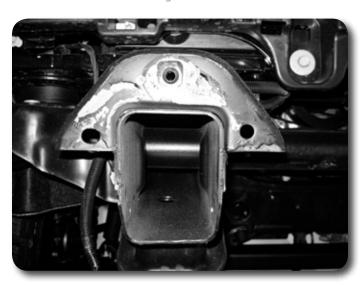


Figure 14

24. The front bumper mounts will also need to be modified. Make a cut mark 3/4" below the edge of the bracket as shown. Figure 15 Finish the cut line by going straight up to the original opening in the bracket. Cut at the marks with a cut off wheel or reciprocating saw.

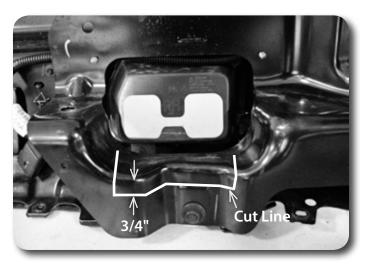


Figure 15

25. Install the new front bumper brackets with the provided 7/16" x 1" bolts and flange lock nuts on each side hole. Using the witness marks of the square hole from the factory bracket, line up the bracket and tighten the 7/16" bolts by hand to hold the position of the bracket. Figure 16 Re-install the factory bolt at the center location and tighten all hardware.

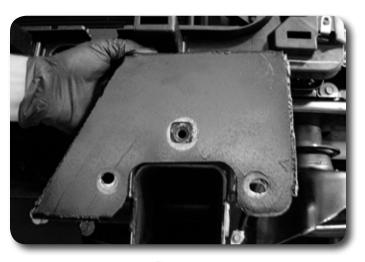


Figure 16

- 26. With the help of an assistant, install the bumper on the vehicle. Align the new brackets with the original bumper mount holes and fasten with the factory hardware. Leave loose.
- 27. Adjust the bumper side to side and tighten the four main vertical bolts mounting the bumper to the bumper brackets. Torque bolts to 65 ft-lbs.
- 28. Swap the outer bumper supports to the opposite side of the vehicle re-install with the factory hardware.
- 29. Reconnect the fog light wire harness connector.
- 30. Install the grill by snapping it back into position and fastening it in place with the 8 factory bolts (4 top and 4 bottom). Tighten the bolts securely.
- 31. Reinstall the bumper valence by first snapping in the 6 front clips and then fastening the corners with the factory hardware.
- 32. Reinstall the upper core support cover with the 12 factory plastic retainers.

#### **REAR**

- 1. Loosen but do not remove all bed mounting bolts. All the bolts mount from the bottom up into captive nuts. 4 bolts per side.
- 2. Remove the passenger side bed mounting bolts. With a hydraulic jack and block of wood, slowly raise the bed just high enough to place the provided lift blocks between the frame and the bed. Place the blocks at the bed bolt locations. Loosely fasten the bed with 12mm x 70mm bolts and 7/16" USS washers.
- 3. Repeat the bed lift procedure on the driver's side.
- 4. Remove the plastic bed pads Figure 17A where the bed crossmember rested on the frame at the rear wheel well (one per side). Install the provided rectangular steel bed spacers where the plastic pads were located and fasten with the ribbed shank plastic clips in the existing frame hole Figure 17B.

#### Step 1 Note

The two rear bolts on each side can be accessed through the bottom of the frame rail.

# **Step 2 Note**

When lifting the passenger's side of the bed, watch the clearance between the rear bumper and the driver's side of the bed.



Figure 17A



Figure 17B

5. With the bed lift complete, go back and remove each bolt one at a time and apply Loctite to the threads. Adjust the bed to cab clearance and torque bolts to 65 ft-lbs.

# **Rear Bumper Lift**

- 6. Lower the spare tire and remove it from the vehicle. See vehicle owner's manual for spare removal procedures.
- 7. Locate the rear wire connector cluster on the rear, driver's side frame crossmember Figure 18. Disconnect the license plate light harnesses.



Figure 18

8. Disconnect the trailer wiring connector from the bumper Figure 19.



Figure 19

9. Remove the 4 bolts (8 total) mounting the rear bumper to the frame rails. 3 are accessed from the side of the frame Figure20A and one up through the bottom Figure 20B. Remove the bumper from the vehicle. Save all hardware.

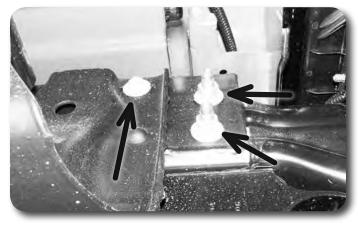


Figure 20A



Figure 20B

10. Remove the factory bumper brackets from the rear bumper. The black caps will have to be removed by releasing the plastic clips to access the upper bolts. Replace the brackets as they were removed with the Zone bumper brackets using the factory hardware. Figure 21.

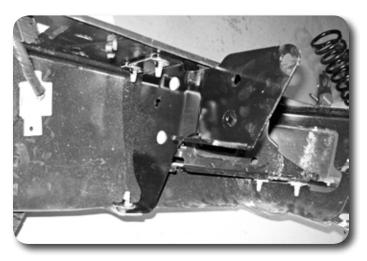


Figure 21

11. IRemove tab and clearance above it slightly (approximately 1/4") with a rotary grinding tool to create extra clearance for the spare tire winch tube. Figure 22

# **Step 11 Note**

Use caution to not create any sparks near the fuel tank.



Figure 22

- 12. Install the provided 1.5" center bumper step spacer using the 1/4" self tapping bolts through the factory holes.
- 13. Install the rear bumper with the new mounts in the vehicle Figure 23. Be sure the new brackets are inside the frame rails and the spare tire winch tubes align Figure 24. Fasten the bumper to the original frame mount holes with the factory bolt tab and nuts. Fasten the bracket through the remaining front-upper hole with the original 10mm bolt and provided 10mm nut and washer. Leave hardware loose.

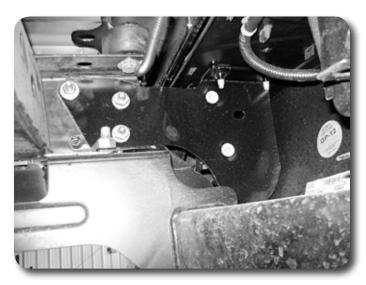


Figure 23



Figure 24

- 14. Tighten all bumper mounting hardware starting with the bumper-to-bracket hardware first. Torque the hardware to the following specs:  $\frac{1}{2}$ " and 12mm hardware 65 ft-lbs, 14mm hardware 95 ft-lbs, and 10mm hardware 40 ft-lbs.
- 15. Reconnect all bumper wiring.

#### **Post-Installation**

- 16. Check all hardware for proper torque.
- 17. Reconnect battery.
- 18. Check Hardware after 500 miles.
- 19. Adjust headlights.

#### **INSTALLATION INSTRUCTIONS - STRUT SPACER**

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Raise the front of the vehicle and support the frame rails with jack stands.
- 3. Remove the front wheels.
- 4. Disconnect the front driver's and passenger's side sway bar links from the sway bar. Save hardware. Figure 1

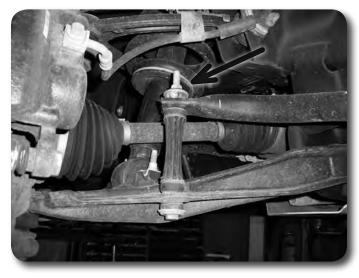


Figure 1

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

5. Loosen but do not remove the three upper strut mount nuts at the frame. Figure 2 Do not loose the center strut rod nut.



Figure 2

6. Remove the nut from the steering tie rod end. Figure 3 Thread the nut back on a couple of turns by hand. Strike the knuckle near the tie rod end to dislodge the rod end taper from the knuckle. Remove the nut and the tie rod end from the knuckle. Save nut.

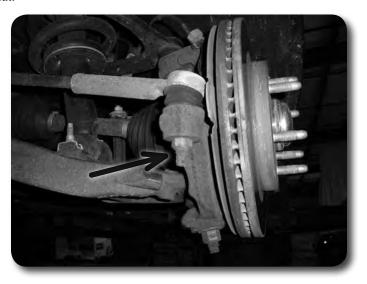


Figure 3

7. Remove the nut from the upper ball joint. Figure 4 Thread the nut back on a couple of turns by hand. Strike the knuckle near the upper ball joint to dislodge the rod end taper from the knuckle. Remove the nut and allow the knuckle to swing rearward out of the way. Save the ball joint nut.



Figure 4

8. Support the lower control arm with a jack. Remove the two lower strut bar pin bolts. Figure 5 The bolts will not be reused. Lower the control arm with the jack so there is about 1" of room between the strut bar pin and the lower control arm.



Figure 5

9. Using a flat head screw driver, remove the factory nut clips from the strut bar pins. Figure 6 These will not be reused.



Figure 6

- 10. Locate one of the new provided strut mount spacers. Position the spacer between the strut bar pin and the control arm. The small tabs on the spacer will point up and be positioned on the outside of the strut bar pin. The "U" shaped portion of the spacer will wrap down around the backside of the control arm mount.
- 11. Align the holes in the strut bar pin and the spacer. Install the provided 7/16" x 3-1/2" bolts with washers down through the bar pin and spacer. Figure 7 Once the bolts are in position, align them with the holes in the control arm and raise the control arm up to seat the assembly together. Fasten the 7/16" bolts with the provided nuts and washers. Torque the 7/16" hardware to 45 ft-lbs.



Figure 7

- 12. With the lower hardware tight. Torque the factory upper strut mount nuts to 40 ft-lbs.
- 13. Reattach the upper ball joint to the knuckle. Use the jack to support the lower control arm and torque the upper ball joint nut to 40 ft-lbs.
- 14. Reattach the steering to the knuckle and torque the factory nut to 44 ft-lbs.
- 15. Repeat installation on the opposite side of the vehicle. When both sides are complete, reattach the sway bar links and tighten hardware until the bushings begin to swell.
- 16. Reinstall the wheels and lower the vehicle to the ground. Torque lug nuts to 140 ft-lbs in a crossing pattern.

# **Step 11 Note**

The bolts must run from the top down. All hardware is located in pack #646.

- 17. Check all hardware for proper torque.
- 18. Check hardware after 500 miles.
- 19. Adjust headlights.
- 20. The vehicle will need a complete front end alignment.

# 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.