

#C9212 Installation Instructions 2002-2009 Trailblazer/Envoy 2/4wd 2" Body 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

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

Send an e-mail to tech-zone@sporttruckusainc.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. Secure and properly block vehicle prior to installation of Zone Offroad Products. Always wear safety glasses when using power tools.
- 5. Zone Offroad Products body lifts are designed to be used on vehicles in good operating condition. It is not recommended that body lifts be used on vehicles in poor physical shape. This includes rusted body mounts, damaged or worn frame-to-body mounting brackets, and poor mechanical condition. Perform a visual inspection of the vehicle before beginning installation.

Difficulty Level

easy 1 2 $\left(3\right)$ 4 5 difficult

Estimated installation: 4-6 hours

Special Tools Required

Reciprocating saw and/or cutoff tool

Tire/Wheel Fitment

30 x 9.50 Tire on stock wheel

Kit Contents		1	Radiator Brkt (drv)	
Qty	Part	1	Radiator Brkt (pass)	
12	2" x 3" Lift Block	2	Bushing	
1	Bolt Pack	1	Rear Bumper Brkt (drv)	
1	Bolt Pack	1	Rear Bumper Brkt (pass)	
1	Bolt Pack	1	1/2" Bolt Fish Wire	
1	Steering Extension	2	5/8"-11 nut tabs	
1	Front Bumper Brkt (drv)	4	1/2"-13 x 1-1/4" bolt tabs	
1	Front Bumper Brkt (pass)	1	0.750 x 0.095 x 2.000 Spacer	
2	2" Front Bumper Spacer	1	Spare Tire Winch Bracket	
_	2 Trong Sumper Spaces	1	Loctite	



INSTALLATION INSTRUCTIONS

- 1. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
- 2. Disconnect the positive and negative battery cables from the battery. The Supplemental Restraint System (airbags) will be deactivated when the battery is disconnected.

>>> FRONT

- 3. Remove the front grill by carefully pulling out on it, releasing the 11 retaining clips. Set grill out of the way.
- 4. Remove the two bolts and one plastic clip from the top/center section of the front bumper cover Figure 1. Save bolts and clip.

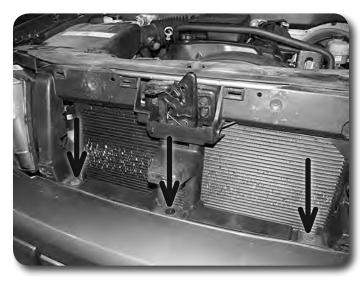


Figure 1

5. Remove the two (one per side) outer plastic retain clips from the bumper at each wheel well Figure 2. Save clips.



Figure 2

 Remove the four bolts from the bottom/center of the front bumper cover Figure 3. Save bolts. Remove the front bumper cover from the vehicle by pulling straight forward.

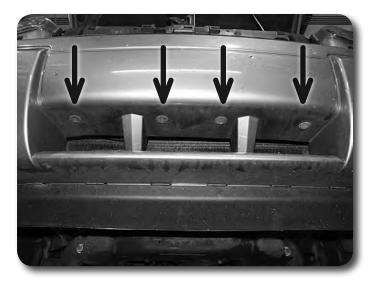


Figure 3

7. Remove the two (one per side) plastic clips and two bolts holding the inner fender to the bumper) Figure 4. Save clips and bolts.

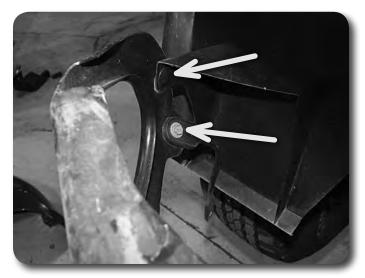


Figure 4

8. Remove the two bumper mounting bolts and remove the bumper from the vehicle Figure 5.



Figure 5

- 9. Remove the bolts mounting the tow hooks to the bumper Figure 6. These cannot be reinstalled after the bumper is relocated.
- 10. Remove the plastic shroud from the inside of the bumper Figure 6. It will not be reused

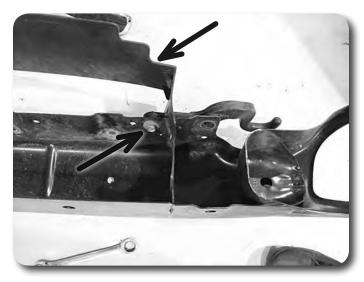


Figure 6

>>> UNDER HOOD

11. Remove the two bolts and two nuts mounting the electrical module to the driver's side of the engine Figure 7. Pull the module free of the mounting studs and allow it to rest out of the way. Save nuts and bolts.

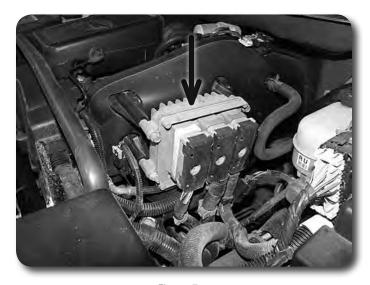


Figure 7

12. Disconnect wire harness Figure 8 from retaining clip on the driver's side (middle of inner fender).

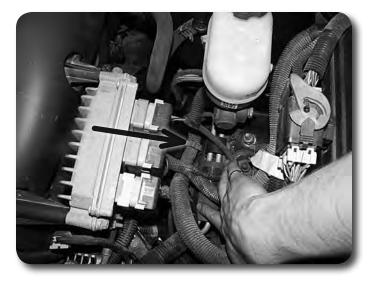


Figure 8

13. Loosen the hose clamp and disconnect the air intake tube from the engine Figure 9.



Figure 9

14. Remove the plastic clips from the plastic core support cover Figure 10. Remove the cover from the core support. Save cover and clips.



Figure 10

- 15. Lock the steering wheel.
- 16. Separate the top and bottom sections of the steering shaft dust boot to expose the universal joint. Remove the bolt attaching the top and bottom sections of the steering shaft Figure 11. Mark the two halves of the shaft for realignment and disconnect the top shaft from the bottom. Save bolt.



Figure 11

>>> REAR

- 17. Lower the spare tire, remove it from the vehicle and set it out of the way. See owner's manual for proper spare tire removal procedure.
- 18. Disconnect the trailer wiring harness from the rear bumper/hitch Figure 12.



Figure 12

19. Remove the four bottom rear bumper cover retaining clips Figure 13. Save clips.

Step 17 Note

Check for proper spare tire winch operation. These winch assemblies are known for poor quality/breakage if not used and lubricated regularly.

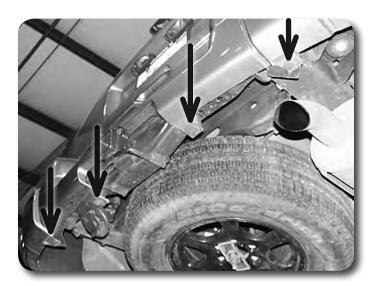


Figure 13

20. Remove the two screws hold each side of the bumper cover to the rear fenders Figure 14. Save screws.



Figure 14

21. Open the rear tailgate and remove the seven screws mounting the bumper cover to the body Figure 15. Save screws.



Figure 15

- 22. Remove the rear bumper cover from the vehicle and set it aside.
- 23. Remove the two bolts mounting the spare tire winch crank to the passenger's side frame rail Figure 16. Save bolts.



Figure 16

 Remove the bolt mounting the spare tire winch to the frame crossmember and remove the winch and winch crank from the vehicle Figure 17. Save winch mounting bolt.



Figure 17

25. Remove the three bolts mounting the rear bumper/hitch to each of the frame rails and remove the bumper/hitch from the vehicle Figure 18. Save hardware



Figure 18

26. Disconnect the fuel filler tube from the frame by remove the plastic retainer clip and sliding the tab out of the hole in the frame Figure 19.



Figure 19

>>> LIFT

- 27. Loosen but do not remove all 12 body mount bolts.
- 28. Remove the 6 passenger's side body mount bolts. The lower body bushing is captive on the bolt and must be removed for reuse. Set the bushing across the jaws of a vise and pound the bolt through with a hammer. This will be necessary with all 12 mounts.
- 29. Using two hydraulic jacks and wooden blocks, lift the passenger's side of the body just high enough to place the 2" tall body lift blocks between the body and the frame. Constantly be checking for any wires, hoses, etc that may be overextending.
- 30. When the blocks are installed fasten the 5 back mounts with 12mm x 160mm bolts and ½" SAE washers in conjunction with the factory lower bushings. Leave hardware loose. The front mount is the same as the others but uses a 12mm x 200mm bolt.
- 31. Lower the body onto the blocks and repeat the procedure on the driver's side. While lifting the driver's side pay close attention to the brake lines running to

Step 30 Note

All body mount hardware is located in hardware pack #218.

- the master cylinder. They have ample room to flex but may need reformed by hand to reduce strain on the fittings.
- 32. With both sides lifted, go back and remove each bolt one at a time and coat the threads with Loctite. Torque all 12 body bolts to 65 ft-lbs.

>>> UNDER HOOD

33. Install the provided steering extension between the upper and lower sections of the steering shaft that were separated (align the marks made earlier). Fasten the extension to the lower section of steering shaft with the factory bolt Figure 20. Fasten the extension to the upper section with a 10mm x 45mm bolt, nut and 10mm washers. Torque 10mm hardware to 30 ft-lbs.



Figure 20

- 34. Reattach the electrical module to the driver's side of the engine with the factory hardware. Torque nuts and bolts to 12 ft-lbs.
- 35. Locate the negative battery cable wire loom. Remove the tape and remove the negative battery cable from the wire loom to gain added length to reach the battery Figure 21. Do not hook that battery back up at this time.



Figure 21

36. Reattach the air intake hose to the intake and tighten the factory hose clamp securely.

Step 33 Note

The 10mm steering extension hardware is locate in hardware pack #219.

Step 37,38 Note

Radiator bracket hardware is located in hardware pack #219. The provided radiator brackets are driver's and passenger's side specific.

- 37. Locate the four core support bolts (two per side) near the upper corners of the radiator. Working on one side at a time, remove the two bolts and install the provided radiator brackets with 8mm x 45mm bolts and 5/16" USS washers. Leave hardware loose. The bracket should run down toward the radiator and to the inside of the vehicle Figure 22.
- 38. With both radiator brackets loosely installed, position a provided urethane stem bushing in the radiator flange hole located just under the bracket. The lip of the bushing will fit snug down into the hole. Fasten the bracket and bushing to the radiator with a 3/8" x 1-1/4" bolt, nut and 5/16" USS washers. Tighten the 3/8" hardware until the bushing begins to swell Figure 22. Go back and torque the 8mm bolt to 22 ft-lbs.



Figure 22

- 39. In some cases the radiator overflow hose may need to be clamped out of the way after the radiator is relocated. A clamp is provided in hardware pack #219 to do this and can be mounted using one of the factory fan shroud bolts.
- 40. Reinstall the plastic core support cover with the original plastic clips.

>>> FRONT BUMPER

41. Locate the small hole just forward of the BOTTOM mounting holes on the front bumper. Make a cut line from the center of the hole on the driver's side of the bumper to the hole on the passenger's side of the bumper Figure 23. This cut will provide clearance for the bumper and the front frame crossmember tube.



Figure 23

42. Locate the front bumper cut template in the instruction sheet and cut it out. Position the cut template on the bottom side of the bumper, aligning the hole in the template with the bumper mounting hole Figure 24. Trace the outline of the template on the bumper and repeat on the other side. This cut will provide clearance for the bumper around the frame horns.



Figure 24

- 43. Cut the bumper along the cut lines with a hack saw, cutoff wheel or plasma cutter. Paint any bare metal to prevent corrosion.
- 44. Locate the existing holes in the front frame body mount. Drill the hole (one on each side of the vehicle) to 7/16" Figure 25.

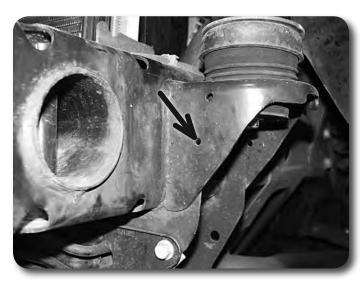


Figure 25

- 45. Mount the modified bumper on the vehicle using the provided 2" metal spacer tubes between the bumper and the top of the frame. Align the bumper mounting holes, spacer and frame holes and install a 1/2" x 9" bolt, nut and 7/16" USS washer on each side. Leave hardware loose.
- 46. Check the clearance between the relocated bumper and frame. Make additional adjustments where necessary then torque the 9/16" hardware to 95 ft-lbs.
- 47. Loosely install the provided lower bumper brackets on the frame using the holes that were drilled out earlier. The brackets are side specific, with tabs pointing toward the outside of the vehicle when installed. Attach the brackets to the

Step 45,47,48 Note

All front bumper mounting hardware is located in hardware pack #219.

frame with 7/16" x 1" bolts, nuts and 3/8" USS washers. With the brackets snug against the bottom of the bumper, torque hardware to 45 ft-lbs Figure 26.



Figure 26

- 48. Using the slot in the new lower bumper brackets as a template, Figure 26 drill a 7/16" hole in the bumper and fasten the brackets to the bumper with 7/16" x 1" bolts, nuts and 3/8" USS washers. Torque hardware to 45 ft-lbs.
- 49. Reattach the inner fender to the bumper with the factory bolts and plastic clips.
- 50. The three lower air vents in the front bumper cover must be trimmed for clearance in the new relocated position. Measure back from the center of the two outer mounting holes 3/4" and mark. Run a cut line across the three vents connecting the two marks. At the edge of each vent make a cut line that extends from the top cut line to the bottom back corner of the vent (6 cut lines total, 2 per vent). Trim the vents off at the marks Figure 27.
- 51. Install the bumper cover on the vehicle and fasten with the factory plastic clips and hardware.



Figure 27

Step 49 Note

The inner fender may need to be trimmed slightly to clear the body mount on each side.

>>> REAR BUMPER

52. Locate the rear-most welded nut on each side of the rear bumper. Measure forward from the center of the welded nut 1" and make a vertical cut line Figure 28. Cut the end of the bumper mount off at the line (driver's and passenger's side).



Figure 28

53. Locate the trailer wire bracket. Cut the bracket off flush with the bumper using a reciprocating saw or cut-off wheel Figure 29. Take care not to cut into the bumper. Paint any bare metal on the bumper and bracket to prevent corrosion.



Figure 29

54. Measure down 1" from the top inside corner of the rear frame rail and mark. Measure toward the outside of the frame 1" and mark as well. Make cut marks that run back to frame crossmember. Cut top and inside of frame rail at marks, the end of the cut will align with the cross member that connects the frame rails Figure 30. Paint any bare metal to prevent corrosion.

Step 53 Note

Care should be taken in cutting the bracket because it will be reused. Try to remove the material at the weld only.



Figure 30

55. Place new bumper brackets against inside of frame rails. Align the two factory holes with the bracket. Mark the new holes to be drilled, remove bracket, and drill to 1/2" at each mark Figure 31.



Figure 31

- 56. Place bumper brackets onto rear bumper. Align bumper bracket with bottom of bumper. One existing hole will line up on the bottom and the original mounting hole with a 16mm nut will line up with bracket Figure 32.
- 57. Drill the existing lower hole out to $\frac{1}{2}$ ". Mark and drill the other hole on the bottom of the bracket to $\frac{1}{2}$ " Figure 32.

Step 56 Note

Place a 5/8" SAE washer (BP 222) between bumper and bracket when marking holes, this will compensate for frame rail thickness.



Figure 32a

58. Place the trailer brake bracket that was removed in earlier steps up to the new bumper bracket. Mark center of holes and drill to 5/16". Attach with 1/4" hardware Figure 32b.

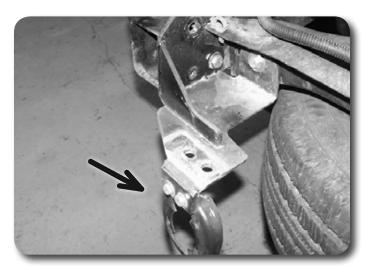


Figure 32b

59. Feed the provided ½" fish wire through the bracket and holes (that were just drilled) out through the end of the bumper tube. Thread a provided ½" bolt tab on the fish wire and pull it through the bracket Figure 33. Loosely fasten the bolt tab with a ½" SAE flat washer, lock washer and non-locking nut. Repeat procedure for the three remaining holes.

Step 58 / Fig 32bNote

Trailer brake controller hardware is in bolt pack #688.

Step 59,60,61 Note

All rear bumper hardware is located in hardware pack #222.



Figure 33

- 60. Loosely install the factory 16mm bolt with a provided 5/8" washer between the new bracket and bumper bracket. The bolt will run through the new bracket, 5/8" spacer washer and into the bumper hole with the welded nut. Leave hardware loose.
- 61. Reinstall bumper with the new brackets attached. The mounting holes toward the front of the vehicle will require a 5/8" x 1-1/4" bolt, 5/8" SAE washer and provided 5/8" nut tab which goes inside the frame rail. All other mounting positions require ½" x 1-1/4" bolts, nuts and ½" SAE washers. Adjust bumper and torque ½" hardware to 60 ft-lbs and 5/8" hardware to 115 ft-lbs.
- 62. Reinstall rear bumper cover with factory hardware.

>>> Spare Tire Relocation

- 63. Remove mounting hardware from spare tire crank (on pass side). Do not remove hardware for bracket directly above spare tire.
- 64. Remove nut clip from bracket where it mounts to the rear crossmember.
- 65. Install the provided 2" offset relocation bracket on the passenger's side frame with the factory winch. Leave hardware loose at this time.
- 66. Fasten the spare tire winch to the new bracket with a 3/8" x 1-1/4" bolt, nut and 5/16" USS washer. Leave loose. Also, loosely attach the other portion of the winch back in its original location on the frame crossmember with the factory hardware.
- 67. Install the provided 2" metal spacer between the rear frame crossmember and winch Figure 34. Attach with ½" x 3" bolt, nut and ½" SAE washer. Torque ½" bolt to 65 ft-lbs. Torque 3/8" and 10mm hardware to 30 ft-lbs.
- 68. Reinstall the spare tire in the vehicle.

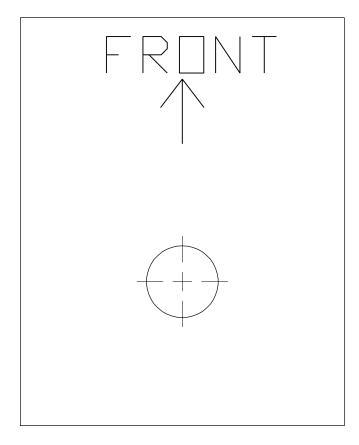
Step 65,66 Note

Spare tire winch hardware is located in hardware pack #222.



Figure 34

- 69. Check all hardware for proper torque.
- 70. Reattach battery cables.
- 71. Check hardware after 500 miles.



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. Longer replacement hoses, if needed can be purchased from a local parts supplier.
- 3. Perform head light check and adjustment.
- 4. Re-torque all fasteners after 100 miles. Always inspect fasteners and components during routine servicing.