

#J9220, J9221 Installation Instructions 1986-1995 Jeep YJ 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

*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.
- 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  $\begin{pmatrix} 2 \end{pmatrix}$  3 4 5 difficult

Estimated installation: hours

## **Special Tools Required**

Minor Welding

Tire/Wheel Fitment

31x10.50 tire/15x8, 3.5" BS wheel

## **Kit Contents**

Qty	Part
2	3"wide x 2"tall Body Lift Block
9	2"wide x 2"tall Body Lift Block
1	Bolt Pack

- Bolt Pack 1
- Loctite® 1
- Exhaust relocation brackets 4
- 6 Radiator relocation brackets
- 1 Transfer Case Shift Lever Extension
- 2 Grill Support Tube
- 3/8" Hose 16" Long 1
- 2 Zip Ties

#### Following for Auto Transmission Only (J9221)

- Transmission Linkage Bracket 1
- Transmission Linkage Extension 1
- 1 Bolt Pack

#### Bolt Pack 202

#### Qty Description

- 6 7/16" USS washer
- 5 3/8" USS washer
- 18 1/4" SAE washer
- 1/4"-20 prevailing torque nut 14
- 1/4"-20 x 2 3/4" bolt 2
- 2 1/4"-20 x 1" bolt
- 2 3/16" x 3/4" pop rivet

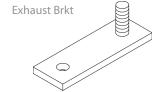
#### Bolt Pack 220

- Qty Description
- 6 1/2"-13 x 5-1/2" bolt
- 5 7/16"-14 x 4-1/2" bolt

#### (J9221 Only)

Bolt Pack 230

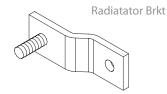
- Qty Description
- 2 1/4"-20 x 1/2" bolt
- 2 1/4"-20 prevailing torque nut
- 2 3/16" x 3/4" roll pin 2
  - 1/4" x 1" self-tapping screw

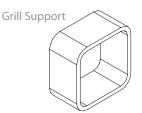












## INSTALLATION INSTRUCTIONS

1. Remove negative then the positive battery cables. If equipped, the Supplemental Restraint System will be deactivated when the battery is disconnected.

#### >>> UNDER-HOOD DISASSEMBLY

- 2. Remove air intake hose from air cleaner box.
- 3. Remove vacuum line from vacuum canister.
- 4. Mark for realignment and remove steering shaft from steering column and steering box by removing the retaining hardware. Remove from vehicle. Lengthen the shaft until the small spring clip is exposed (leave the large clip located further up the shaft in place). Remove the small clip and retract the shaft back to its original length. The shaft will be reinstalled after the lifting operation is complete.
- 5. Remove the plastic Jeep cover that is mounted to the frame in front of the grill. Disconnect the two plastic brake line clips from the front tie bar support. Remove the tie bar support from the vehicle.
- 6. Remove the power steering reservoir from the radiator and set it aside.
- 7. Remove the six radiator mounting bolts (three on each side) and allow the radiator to rest on the frame and steering box.

## >>> AUTOMATIC TRANSMISSION MODELS ONLY

- 8. Remove the transmission shift linkage from the steering column and the pivot assembly.
- 9. Remove the pivot assembly. Remove the two bolts that mount the pivot bracket to the body just above the frame rail. Remove the linkage connecting the pivot assembly to the transmission and pry the pivot assembly from the bracket mounted to the transmission. Remove the pivot assembly from the vehicle.

## >>> FUEL FILLER

- 10. Remove fuel cap and detach fuel filler neck from plastic body mount (typically six screws).
- 11. Detach the protective plastic cover located under the body directly beneath the fuel filler neck. The cover can be detached at the rear of the vehicle and swung forward. This will provide access to the fuel filler tube for modification later.

## >>> Exhaust

12. Remove the exhaust from the rubber mounts on the exhaust hanger located just in front of the rear axle.

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- 13. Loosen all body mounting bolts (11 in all) but do not remove.
- 14. Remove the body mounting bolts on the passenger's side of the vehicle and the front center bolt. Using a hydraulic jack and a wooden block, lift the passenger's side of the vehicle up just high enough for the body spacers to be placed. The two 3" x 2" spacers go on the mounts located directly behind the front axle on either side on the vehicle. It will not be possible to install the front center spacer until the entire vehicle has been lifted. Watch for hoses or wires that may be binding or stretching while lifting.

## Warning

Gasoline is flammable. Use extreme caution when working around fuel lines and tanks. Any sparks could ignite fuel or fuel vapor, causing an explosion or fire resulting in personal injury or death. Clean up all fuel spills.

## Step 15 Note

All body mount hardware is located in hardware pack #220.

## Caution

All welding should be performed by a certified welder.

- 15. Start but do not tighten the new mounting bolts. They are installed in the following locations; front-center 7/16"-14 x 4-1/2", the three mounts along the frame under the doors 1/2"-13 x 5-1/2", and the two rear mounts 7/16"-14 x 4-1/2".
- 16. Repeat the lift procedure for the driver's side of the vehicle and install the front center mount.
- 17. Check body for correct alignment on the frame. Tighten all mounting bolts. Use Loctite<sup>®</sup> on all body mounting hardware.
- 18. Install the two metal body spacers under the rubber pads on both sides of the grill. Weld the supports to the frame (Fig. 1).

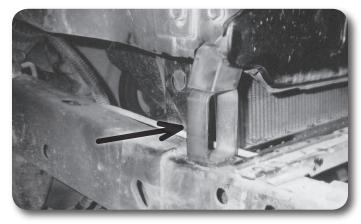


Figure 1

19. Reinstall the steering shaft using the stock hardware. Use the alignment marks made during disassembly. Use Loctite<sup>®</sup> on all steering components.

#### >>> FRONT COVER MODIFICATIONS

20. Mark the front tie bar support for clearance around the new body mount. Cut the support (Fig. 2) and reinstall it on the vehicle. Reattach the brake lines using the stock plastic fasteners.

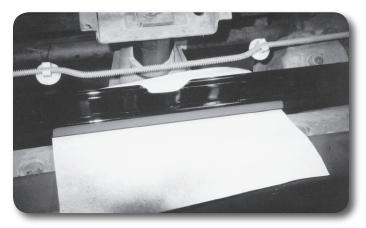


Figure 2

- 21. Mark the plastic Jeep cover in the same way as the tie bar support. Cut the plastic cover and reinstall it on the vehicle (Fig. 3).
- 22. Relocate the metal identification tag, if equipped, that is mounted on the front body mount that is exposed as a result of the body being lifted. The tag can be placed in any convenient location using the stock screw. (The top of the radiator fan shroud is a good location.)



Figure 3

## >>> UNDER-HOOD MODIFICATIONS

- 23. Remove the air cleaner box from its mounting bracket. Remove the 3 rivets holding the bracket to the inner fender. It is recommended that rivets be used if possible to remount bracket.
- 24. Move the bracket straight down from the original mounting holes (Fig. 4) until the bottom support leg is just on the edge of the inner fender (about 2" down). On some models, it may be necessary to bend the bracket legs slightly. Mark the new hole locations (the bottom leg can no longer be used) and drill two 3/16" holes. (The lower support leg can be trimmed so that it does not extend past the edge of the inner fender)

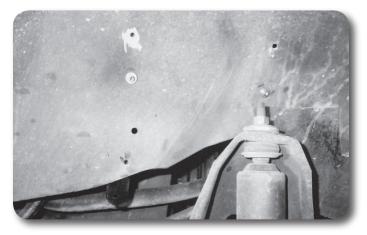


Figure 4

- 25. Reinstall the support bracket with 3/16" x 1/2" pop rivets. Reinstall the air cleaner box and reconnect the air intake hose to the air cleaner box.
- 26. Attach new vacuum hose to vacuum canister and intake.
- 27. Reinstall radiator using the six radiator relocation brackets (Fig. 5). Mount the six relocation brackets to the original mounting holes in the body using the stock hardware. Mount the brackets in the correct position and tighten the bolts. Mount the radiator to the studs on the relocation brackets and fasten them with a 1/4" SAE washer and a 1/4"-20 lock nut. Reinstall power steering reservoir. Tighten all the remaining fasteners and check for fan-to-shroud clearance.

## Step 23 Note

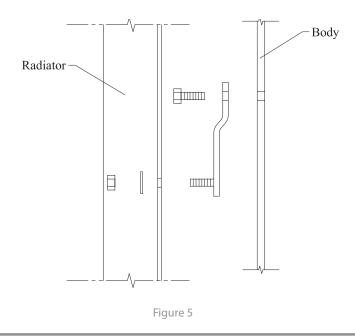
If rivet gun is not available, two 1/4" x 1" bolts, washers and nuts are also provided in the kit to replace the rivets. This hardware is located in hardware pack #202

## Step 24 Note

Air box mounting bracket geometry varies between model years. Some additional modification may be required to relocate air box.

## Step 27 Note

All hardware needed for the radiator bracket install is located in hardware pack #202.



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- 28.. Install the transfer case shift adapter. Thread adapter on the shift lever and tighten. Install the lock nut and then the knob and tighten so that the knob is facing the correct direction. (The extension can be painted to match the shift lever for a more uniform look).
- 29. Check transfer case shift operation to ensure that it engages in all ranges. If there is trouble with engagement, the lever may need to be bent or the floor board will need to be trimmed to provide adequate clearance.

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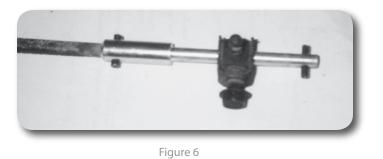
30. Check to see if all gears fully engage. If gears do not fully engage the shift lever will have to be heated and bent forward or the floor board will need to be trimmed to provide adequate clearance. Reinstall the shift boot and check for gear engagement again. It may be necessary to trim the shift boot housing. When boot is reinstalled and everything is in working order install the lock nut and shift knob.

#### >>> AUTOMATIC TRANSMISSION MODELS

- 31. Cut off the crimped end of the upper shift linkage (that was removed from the vehicle during disassembly) so the adjuster sleeve can be removed (about 1/2" off the end of the linkage).
- 32. Slide the shift extension onto the linkage rod until it bottoms out. Align the flat edge on the extension to the flat edge on the linkage. Using the extension as a template, mark the hole location on the flat side of the linkage.
- 33. Remove the extension from the linkage and drill a 3/16" hole in the linkage on the center mark. Note: Take care to drill the hole square with the flat on the linkage.
- 34. Slide the extension back onto the linkage, aligning the flats, and secure with a 3/16" x 3/4" roll pin.
- 35. Slide the adjuster sleeve onto the extension by aligning the flats on each piece. Leave loose for adjustment. Install a 3/16" x 3/4" roll pin in the end of the extension to retain the adjuster sleeve. Fig. 6 shows the modified linkage assembly.

## Step 34 Note

All hardware needed for the auto trans adapter install is located in hardware pack #230.



- 36. Attach the pivot relocation bracket to the original mounting holes using two 1/4" self-tapping screws. The end with large hole should be hanging below and slightly rearward of the original location.
- 37. Attach the pivot assembly to the relocation bracket using two 1/4" x 1/2" bolts and lock nuts. The pivot rod runs through the large hole in the bracket (Fig. 7).



Figure 7

- 38. Install the opposite end of the pivot assembly in the bracket attached to the transmission and reconnect the linkage from the transmission to the pivot assembly.
- 39. Install the upper shift linkage to the pivot assembly (Fig. 8).

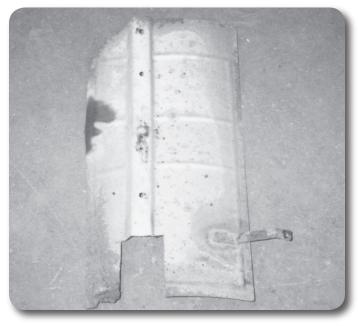


Figure 8

40. Adjust linkage so that all gears engage and the indicator on the dash is correct then tighten the adjuster sleeve.

## >>> EXHAUST

- 41. Modify the heat shield. Mark heat shield for clearance of exhaust hanger when it is relocated 2" lower.
- 42. Remove heat shield and exhaust hanger. Trim heat shield and reinstall (Fig. 9).





## Step 43 Note

All hardware needed for the exhaust bracket install is located in hardware pack #202.

- 43. Loosely mount four exhaust relocation brackets with 1/4" lock nuts and 1/4" SAE washers to the hanger bracket, attaching the studs on the hanger from the inside out.
- 44. Install modified hanger on vehicle through access slot cut in heat shield. Using two 1/4"-20 x 2-3/4" bolts, two 1/4" lock nuts, and four 1/4" SAE washers, attach the exhaust hanger through the relocating bracket, through the original mounting hole, and through the opposite bracket (Fig. 10).
- 45. Reinstall exhaust on hanger. (Use a little grease or other lubricant on rubber hangers to aid in installation)



Figure 10

#### >>> FUEL FILLER

- 46. Adjust the fuel fill and vent hose at the tank and neck to get adequate slack for reattachment to the body.
- 47. Attach filler neck to the plastic body mount with the stock screws. Install filler cap.
- 48. Tighten all hose clamps.
- 49. Reattach the protective plastic cover (cover may need to be trim to provided clearance for relocated fill hoses).

#### >>> Post Installation Procedure

- 50. Reattach battery cables, positive first.
- 51. Perform final visual check to ensure all wires and hoses are reconnected and have adequate slack.

## 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.