



#F9378 Installation Instructions 1998-2000 Ford Ranger 3" 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.

Difficulty Level

easy 1 (2) 3 4 5 difficult

Estimated installation: 4-6 hours

Special Tools Required

T55 Torx Bit Socket

» 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.

Kit Contents

Qty	Description
14	3" x 3" Body Blocks
4	3" x 2" x 2" Metal Bed Spacer
2	2" x 3" x 1" Radiator Bracket
1	Bolt Pack - Body/Bed Bolts (#413)
1	Bolt Pack - Front Bumper, misc (#414)
1	Bolt Pack - Spare Tire (#415)
1	Bolt Pack - Rear Bumper (#416)
1	Front Bumper Bracket (DRV)
1	Front Bumper Bracket (PASS)
1	Rear Bumper Bracket (DRV)
1	Rear Bumper Bracket (PASS)
2	3" Radiator Drop Bracket w/ stud
2	"L" Shaped Ground Extension
2	3/4" OD x 3" Sleeve
1	1 1/2" x 5" Fuel Filler Extension
1	3/4" x 17-1/2" Fuel Vent Hose
1	3/4" x 6" Hose
2	#10 Hose Clamp
1	Steering Extension
2	#28 Hose Clamp
3	Zip Ties
1	Loctite



INSTALLATION INSTRUCTIONS

1. Remove the negative battery cable first, then the positive battery cable. If equipped, the Supplemental Restraint System will be deactivated when the battery is disconnected.
2. Measure and record the space between the bumpers and the body as well as the space between the cab and bed for reference during installation of this kit.

» FRONT INSTALLATION

Interior Removal

3. Pull back the carpet at the front floorboard to expose the mounting bolt access holes **Figure 1**. It is not necessary to remove the kick panels or scuff plates. The carpet can be pulled out from under the kick panel and tucked back in after installation is complete.



Figure 1

4. Remove the plastic covers to gain access to the mounting bolts.
5. Pull carpet back at the rear cab corners to reveal rear cab mounting access holes **Figure 2**. Plastic body panels do not have to be removed. This is the same for regular and extended cabs.
6. Loosen but do not remove the mounting bolts in the front floorboard and at the rear of the cab.



Figure 2

» TRANSMISSION

Manual Transmission

7. Manual transmissions require Zone Offroad shift extension kit #F9802. Follow instructions provided in the shift extension kit.

Automatic Transmission

8. Automatic transmissions are cable operated and require no modification. Remove the cable from any clips that are holding it to the body that may cause binding while lifting.

» TRANSFER CASE

9. On four wheel drive models equipped with electronic 4 wheel drive shift control, remove the wire loom mounting tab from the bracket at the rear of the transfer case.
10. Attach wire loom clamp to the wire loom. Attach clamp to the bracket on the back of transfer case using a 1/4" x 1" bolt, two 1/4" SAE washers, and a nut **Figure 4**.

Step 10 Note

Clamp and hardware located in hardware pack #414.

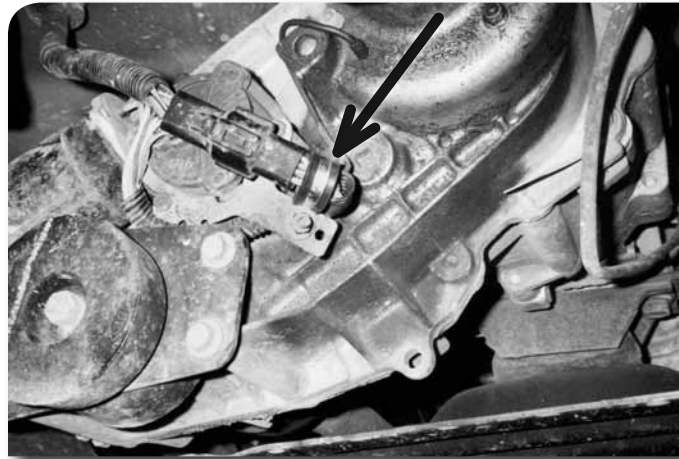


Figure 4

» GROUND STRAP RELOCATION

11. There are two ground straps connecting the frame to the body. One is located under the driver's and passenger's doors. Remove the straps from the body. Save hardware.
12. Using the stock hardware, attach the provided 'L' shaped ground strap relocation bracket to the body with the long end pointing down.
13. Attach the ground straps to relocation brackets using 1/4" x 1" bolts, 1/4" SAE washers, and nuts **Figure 5**.

Step 13 Note

Ground strap hardware located in hardware pack #414.



Figure 5

» FUEL LINE COVER

14. Locate the sheet metal cover (if equipped) on the inside of the driver's side frame rail that covers fuel and brake lines going to the rear of the vehicle **Figure 6**. Remove the four bolts that mount the cover to the frame. Remove the cover from vehicle. The cover will be modified and reinstalled later. Save hardware.

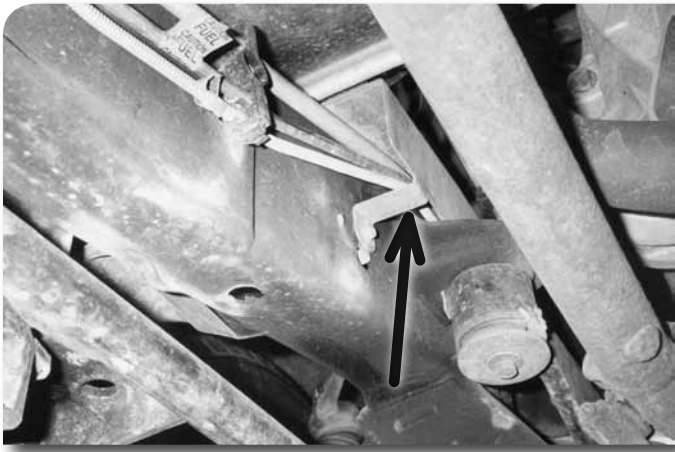


Figure 6

15. The large diameter line must be removed from the mounting bracket **Figure 7**. Remove the bolt that closes the bracket and remove the line from the bracket. Save hardware.
16. Reinstall the bracket and the bolt. **CAREFULLY** bend the line upward to gain slack for lifting.

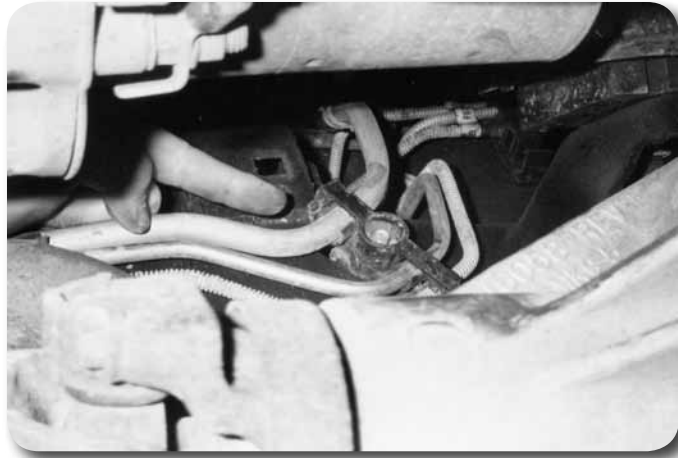


Figure 7

» FRONT BUMPER REMOVAL

17. Disconnect the fog lights and any other wires that are attached to the front bumper.
18. If equipped, remove the three bolts mounting each tow hook **Figure 8** to the frame and remove the hooks from the vehicle. Save hooks and hardware.
19. Remove the four nuts that mount the front bumper to the frame. Remove the bumper from the vehicle. Save hardware.

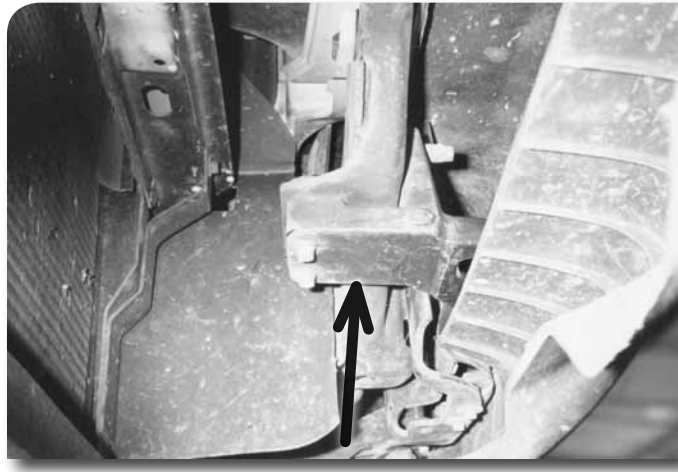


Figure 8

» UNDER THE HOOD

20. Locate the ground strap that runs from the back of the engine to a stud on the firewall. Remove the nut and strap from the stud and replace the nut on the stud
21. Remove lower wiper motor mounting bolt (directly below the stock ground stud) and attach the ground strap **Figure 9**. Tighten the mounting bolt.



Figure 9

22. Locate the wire loom that runs from the battery to the driver's side of the engine. It is attached to the engine by a bracket mounted to a stud **Figure 10**. Remove the bracket from the stud and the wire from the bracket. The bracket will be relocated on the wire after lifting.
23. Remove the air intake hose from the throttle body and the air filter box. Disconnect any other wires or hoses connected to the intake hose and remove it from the vehicle.
24. Remove the brake lines from the plastic clips on the driver's side fender well and frame rail. **CAREFULLY** bend the lines to allow for slack while the vehicle is lifted.



Figure 10

» **RADIATOR**

25. Remove the two bolts that mount the radiator to the top of the core support.
26. Lift the radiator up and off the lower mounting pads. Reposition the radiator under the lower mounting pads. Allow the radiator to rest against the fan during lifting.

» **STEERING EXTENSION**

27. Lock the steering wheel to prevent it from turning. The steering shaft is coupled near the firewall. Mark the upper and lower sections of steering shaft for realignment.

Step 28 Note

DO NOT allow the two shafts to turn independent of each other when disconnected.

Step 29 Note

Steering extension hardware located in hardware pack #414.

28. Remove the bolt that connects the upper steering shaft to the lower steering shaft. Slide the lower steering shaft down away from the firewall
29. Install the female end of the steering extension over the upper steering shaft. Fasten the extension with a 3/8" x 1-1/2" bolt, two 3/8" SAE washers, and a nut.
30. Install the lower steering shaft on the extension by aligning the marks on the shafts **Figure 11**. Fasten the lower shaft to the extension with the stock hardware. Torque factory and 3/8" hardware to 35 ft-lbs. *Use Loctite® on all steering hardware.*

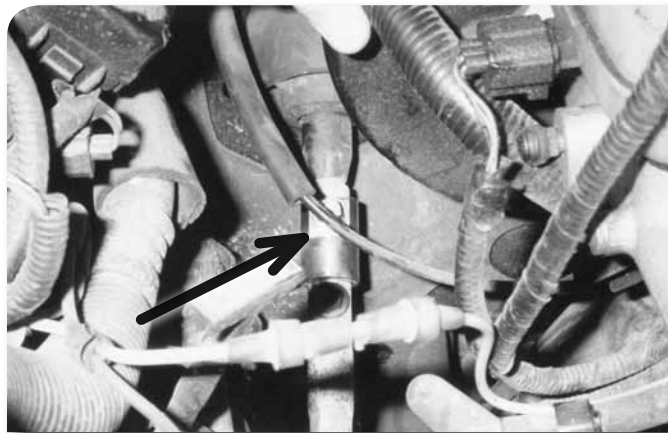


Figure 11

Step 32 Note

New body bolts are located in hardware pack #413. The 7/16" USS washers are located in hardware pack #414.

» CAB LIFT

31. Loosen but do not remove the remaining cab bolts located on both sides of the core support.
32. Remove the mounting bolts on passenger's side only. Using a hydraulic jack and wooden block, lift the passenger's side of the vehicle slowly, continuously checking for wires or hoses that are binding. Lift the cab just high enough to place the body spacers. Before placing the front spacer, remove front mount bushing and using a 1/2" drill bit, drill the threads out of the bushing sleeve and replace the bushing in the frame. Use the following bolts in conjunction with 7/16" USS washers and stock hardware in these locations: front- 12mm x 180mm, front floorboard 12mm x 140mm, rear- 12mm x 160mm. Do not tighten at this time.
33. Repeat lift procedure for the driver's side of the cab.
34. Align the cab to the bed with the aid of the measurements taken earlier and torque all body mounting hardware to 65 ft-lbs. *Use Loctite® on all mounting hardware.*

» FUEL LINE COVER

35. The cover must be modified to provide clearance for the fuel line that moved upward after the cab was lifted. The cover can be bent so that the two lower and rear upper mounting holes are still used. Bend cover for adequate clearance **Figure 12**.
36. Install modified cover to frame using the lower and rear upper mounting holes. Check to ensure that no lines are rubbing on the cover. If there is contact, remove the cover and make necessary modifications until cover can be installed with no contact with lines.

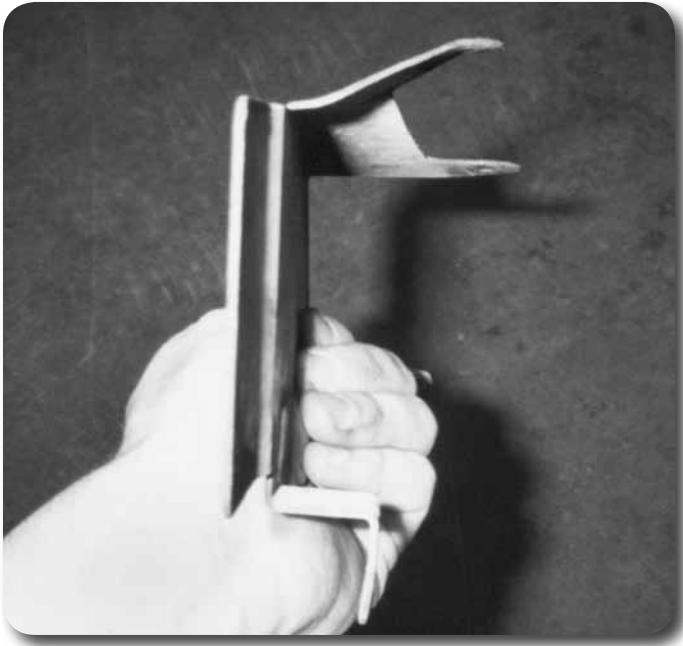


Figure 12

» **AUTOMATIC TRANSMISSION**

37. Check automatic transmission shift cable to see that it is not binding as a result of lifting the body.

» **FRONT BUMPER INSTALLATION**

38. Install the front bumper relocation brackets on the front bumper with the studs facing out and fasten with stock nuts **Figure 13**. Do not tighten at this time.

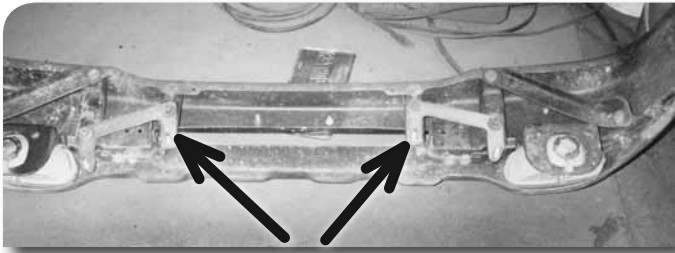


Figure 13

39. The frame must be modified to provide clearance for the fog lights (if equipped) that are mounted in the bumper. **Figure 14** shows the cut required. Remove approximately 1/3 of the outer slots.

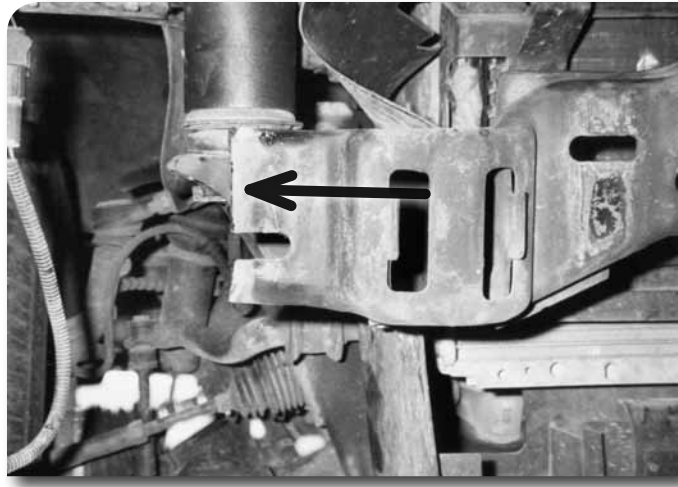


Figure 14

40. The front bumper must be modified for frame clearance. Remove the tab (on each side) protruding from the stock bumper brackets **Figure 15**.

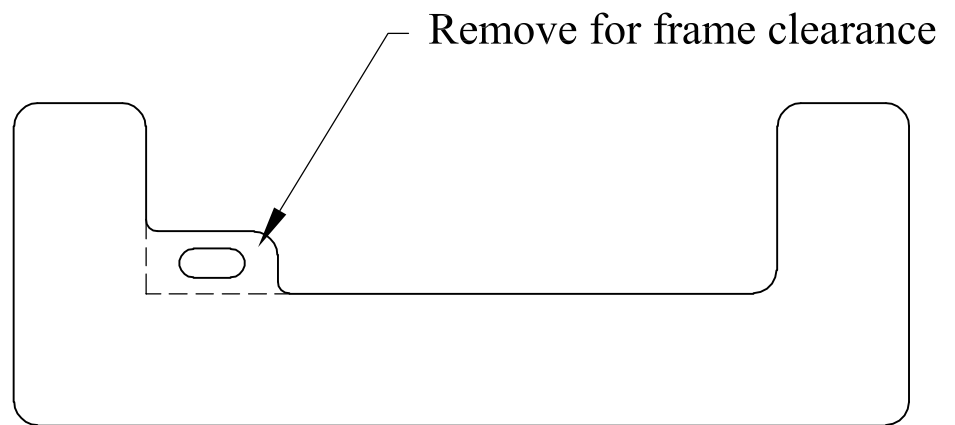


Figure 15 - Bottom View of Factory Bumper Bracket

Step 41 Note

Front bumper hardware located in hardware pack #414.

Step 42 Note

Tow hooks can be reinstalled on vehicle but significant modification of front valance is required.

Radiator Relocation

All radiator relocation hardware located in hardware pack #414.

41. Install the bumper on vehicle and fasten using four 1/2" USS washers and 1/2" nuts. Do not tighten at this time.
42. Adjust the bumper-to-body clearance using the measurements taken earlier and tighten all mounting hardware. *Use Loctite® on all mounting hardware.*
43. Reconnect fog lights and any other wires that were attached to the front bumper

» RADIATOR RELOCATION

44. Remove the rubber mounting pads from the lower radiator mounts and install them in the small hole of new lower relocating brackets. Install the provided 5/16" u-nuts in the opposite end of the bracket with flat side facing out. Bracket is shown installed in **Figure 16**
45. Mount the new upper radiator relocation brackets (3" strap w/ stud) to the stock mounts on the core support using the stock hardware so that the studs are pointing toward the radiator.
46. Mount the radiator on the relocation bracket studs and fasten with 1/4" nuts and 1/4" SAE washers. Do not tighten at this time.
47. Slide the lower relocation brackets, with mounting pads installed, over the legs of the radiator.

48. Mount the relocations brackets **Figure 16** to the stock lower mounting brackets using two 5/16" x 1" bolts and 5/16" USS washers into the u-nuts installed on the relocation bracket. Do not tighten at this time.
49. Adjust shroud to fan clearance and tighten all mounting hardware.

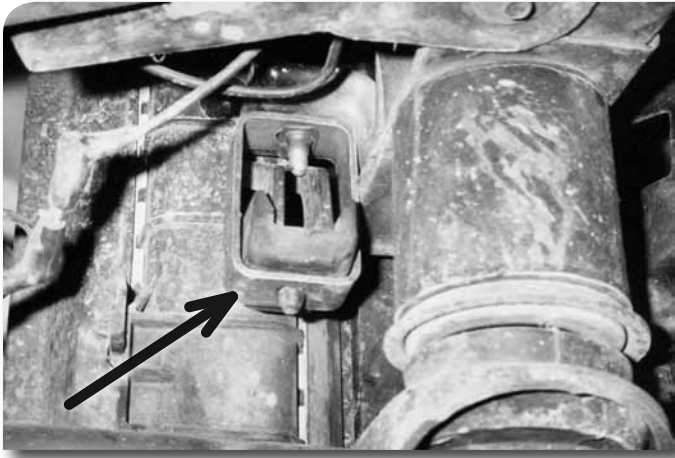


Figure 16

» UNDER THE HOOD

50. Reattach the wire loom bracket that was previously removed to the wire loom. Install the bracket on the original mounting stud on the driver's side of the engine **Figure 10** using the stock nut.
51. Reattach the air intake hose to the throttle body and the air filter box. Attach any other hoses or wires that were removed.
52. On A/C equipped models the A/C hose may be rubbing on the alternator. Use the provided 3/4" x 6" piece of hose and zip ties to insulate the hose **Figure 17**.
53. Make a visual check to see that no other brake lines, wires, or hoses are binding or rubbing. Make necessary modifications where needed

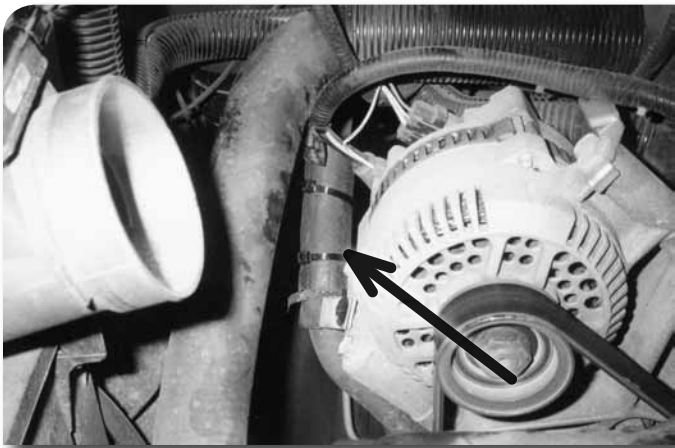


Figure 17

» INTERIOR ASSEMBLY

Manual Transfer Case Vehicles Only

54. Check to see that the transfer case can shift into all ranges. If it will not shift in all ranges the floorboard must be notched for adequate clearance. Install the shift boot

and check operation again. If it will not shift in all ranges the boot will need to be modified for adequate clearance

55. Replace the mounting bolt access covers and replace the carpet back to its original location. Reinstall shift console.

REAR INSTALLATION

» FUEL FILLER

56. Remove the fuel cap. Remove the screws that mount the fuel filler neck to the body. Save screws.
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» SPARE TIRE REMOVAL

57. Lower spare tire and remove from vehicle. **Note: For instructions on spare tire removal see owner's manual.**
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» REAR BUMPER REMOVAL

58. If equipped, remove the rear tow hook from the frame. Remove the four bolts that mount the tow hook **Figure 18** and remove it from the vehicle. Save hardware.



Figure 18

59. Disconnect the license plate lights and any other wiring that is attached to the bumper.
60. Remove the four bolts that mount the rear bumper to the frame **Figure 19** and remove bumper from the vehicle. Save hardware.



Figure 19

»» **BED LIFT**

61. Loosen but do not remove all of the bed mounting bolts. The bolts are accessed from inside the bed and require a t-55 torx socket to remove.
62. Remove the bed mounting bolts from the passenger's side of the vehicle only. Using a hydraulic jack and wooden block, slowly lift the bed while continuously checking for wires or hoses that may be binding. Lift the bed just high enough to place the body spacers.
63. Install the new mounting bolts with 7/16" USS washer from the top down and thread into the stock nuts attached to the frame. The bolts are located as follows: 12mm x 200mm in the front mount and 12mm x 180mm bolts in all other locations. Do not tighten at this time.
64. Repeat bed lift procedure for the driver's side of the vehicle. Take care to ensure that the fuel filler neck falls through the body while lifting
65. Install the provided 3" x 2" x 2" metal bed spacers at locations where the bed cross members originally rested on the frame. Tack weld the spacers to the frame.
66. Align the bed to the cab using the measurements taken earlier and torque all mounting hardware to 65 ft-lbs. *Use Loctite® on all mounting hardware.*

Step 63 Note

New bed bolts are located in hardware pack #413. The 7/16" USS washers are located in hardware pack #414.

CAUTION—Step 65

All welding should be performed by an experienced welder.

»» **FUEL FILLER EXTENSION**

67. Remove fuel filler assembly. Loosen the hose clamps holding the filler and vent hoses to the fuel tank. Remove the hoses from the tank and the assembly from the vehicle.
68. Loosen the hose clamp holding the small vent hose to the filler neck and remove the vent hose. Install the new 3/4" x 17-1/2" vent hose to the filler neck using a #10 hose clamp. Tighten clamp.
69. Lengthen filler hose. Cut the filler hose in two pieces at the middle of the hose. Insert the 1.5" OD x 5" long metal filler extension in both pieces of the hose and install two #28 hose clamps. Do not tighten clamps.
70. Fasten the filler hose to the gas tank with the factory clamp. Fasten the vent hose with the #10 clamp provided.
71. Adjust the filler extension to appropriate length and tighten remaining clamps

Step 71 Note

Make sure there is adequate amount of extension in both sections of filler hose.

» REAR BUMPER INSTALLATION

72. Remove stock bumper brackets from the bumper. Loosen but do not remove the bolts mounting the outside support brackets to the bumper. Remove the bolts mounting the outside support brackets to the inside brackets. Remove the four bolts mounting the inside brackets to the bumper and remove the brackets from the bumper.
73. Mount new bumper brackets to the bumper as shown in **Figure 20** using stock hardware. Attach the outside support brackets to new bumper brackets using the stock hardware. DO NOT tighten any mounting hardware at this time.

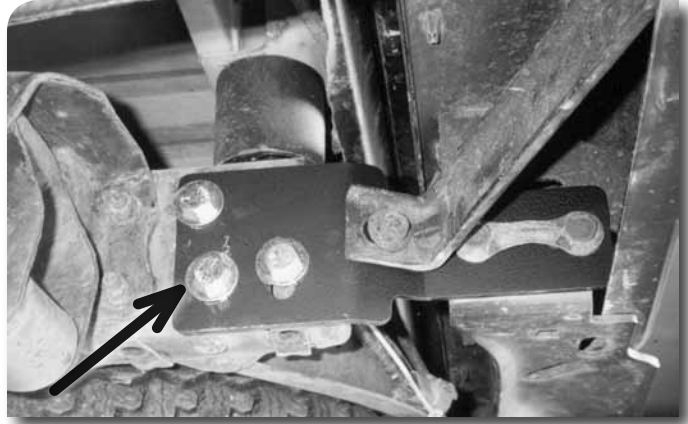


Figure 20

Step 74 Note

Rear bumper hardware is located in hardware pack #416.

The rear tow hook can be reinstalled at this in its original position over the new brackets. Use the stock bolt and nut at the rear cross member.

74. Loosely mount the bumper to the frame using five 1/2 x 1-1/2" bolts, ten 7/16" USS washers, and 1/2" nuts. There are three mounting holes on the passenger's side and two on the driver's side.
75. Adjust the bumper to the proper location with the aid of the measurements taken early and tighten all mounting hardware. Check tailgate clearance in opened position.
76. The upper mounting hole for the driver's side bracket must be drilled in the frame **Figure 21**. Using the bracket as a guide, drill a 1/2" hole in the center of the slot. Insert a 1/2" x 1-1/2" bolt with 7/16" USS washers and 1/2" nut in the hole and tighten. Torque all rear bumper hardware to 60 ft-lbs.

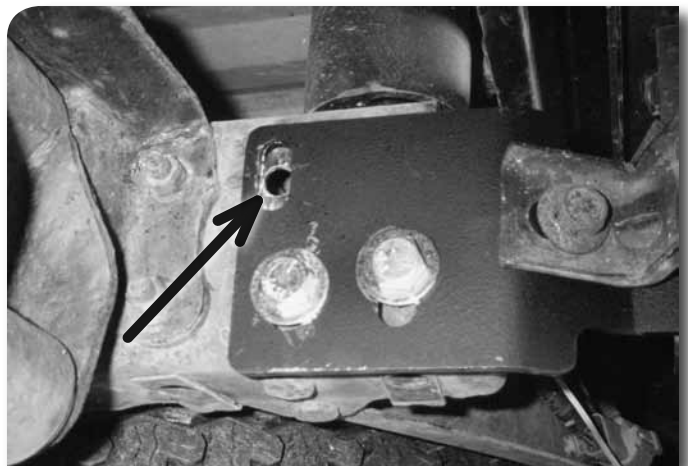


Figure 21

» SPARE TIRE WINCH RELOCATION

77. Remove the two bolts mounting the spare tire winch to the cross member. Remove the winch from the vehicle.
78. Using a 3/8" drill bit, drill out the two winch mounting holes in the frame and the two threaded holes in the winch.
79. Replace the modified winch in the vehicle **Figure 22**. Position two 3/4" OD x 3" winch spacers between the winch and the cross member and align the holes. Insert a 3/8" x 4" bolt and 3/8" SAE washer in each mounting hole. Fasten with two 3/8" lock nuts and 3/8" SAE washers. Torque hardware to 30 ft-lbs. *Use Loctite® on all mounting hardware.*
80. Replace the spare tire to its stowed position.

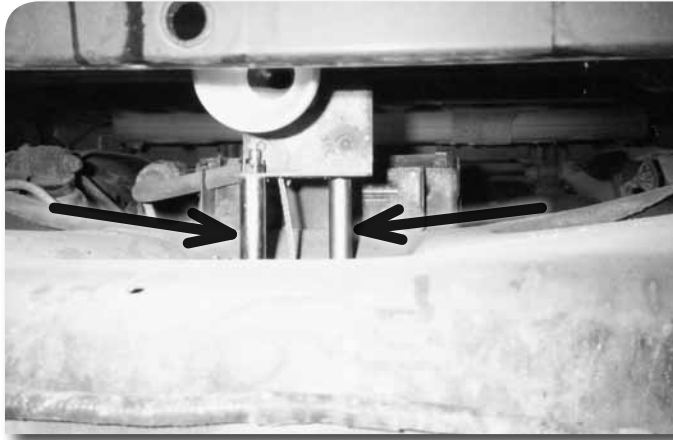


Figure 22

81. Check all hardware for proper torque.
82. Check hardware after 500 miles.
83. Adjust headlights.

Step 79 Note

Spare tire winch hardware is located in hardware pack #415.

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 board 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.