

3651 N. Hwy. 89 • Chino Valley, AZ 86323 (928) 636-7080 • www.p-a-g.net

## FORD F150 BODY LIFT KIT INSTALLATION INSTRUCTIONS 2003 2" KIT# 70042 3" KIT# 70043

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Installation of a Performance Automotive Group body lift kit will change the vehicle's center of gravity and handling characteristics both on- and off-road. You must drive the vehicle safely! Extreme care must be taken to prevent vehicle rollover or loss of control, which could result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers and always make sure all vehicle occupants have their seat belts fastened.

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Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

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Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

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DO NOT combine suspension, body, or other lift devices. Use of vehicle with combined lifts may result in unsafe and/or unexpected handling characteristics.

#### **M WARNING**

This kit should only be installed on a vehicle that is in good working condition. Before you install the kit, thoroughly inspect the vehicle for corrosion or deformation of the sheet metal around the factory body mounts. If the vehicle is suspected to have been in a collision or misused, do not install this kit. Off-road use of your vehicle with this kit installed may increase the stress applied to the factory body mounts. We do not recommend that any vehicle with a body lift kit installed be involved in any extreme off-road maneuvers such as jumping. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

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Many states and municipalities have laws restricting bumper heights and vehicle lifts. Consult state and local laws to determine if the changes you intend to make to the vehicle comply with the law.

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The installation of larger tires may reduce the effectiveness of the braking system.

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Always wear eye protection when operating power tools.

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Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

#### 🖄 WARNING

Accidental deployment of the air bag can result in serious personal injury or death. To avoid accidental deployment during installation of the kit, the Supplemental Restraint System (SRS, or airbag) must remain deactivated. Do not allow anyone near the airbag during installation. Refer to the factory service manual or owner's manual for the recommended procedure to disable the SRS. After you install the kit, reactivate the SRS before driving the vehicle.

#### NOTE

Performance Automotive Group recommends using the Loctite® supplied in the kit on the threads of all kit nuts and bolts unless specified otherwise in these instructions.

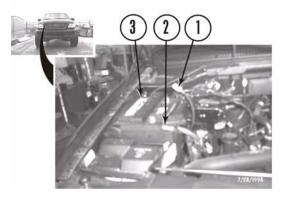
#### NOTE

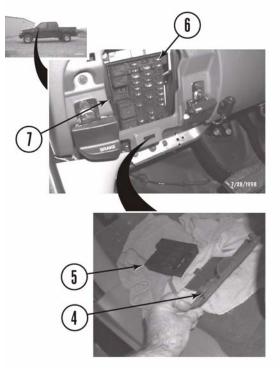
As you read through this procedure, note that each part referenced has the same callout number throughout. Also, the part number in the text matches the corresponding part number in the art. Kit parts are prefaced by the word *kit* in italics.

#### NOTE

You will find it easier to keep track of hardware if immediately after removal you put the fasteners for each subassembly in a paper lunch bag and write on the bag where they go.

- 1. Read all warnings and instructions completely and carefully before you begin.
- 2. Check to make sure the kit is complete (refer to the Parts List, section E).
- 3. Only install this kit on the vehicle for which it is intended. If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-0979.
- 4. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
- 5. Disconnect both battery cables.
  - a. Disconnect the negative cable (1) first, then the positive cable (2) from the battery (3).
- 6. Remove two covers (4 and 5) and the airbag fuse (6) from the fuse panel (7).



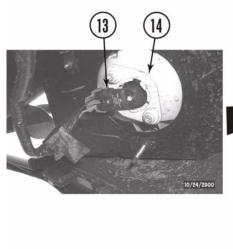


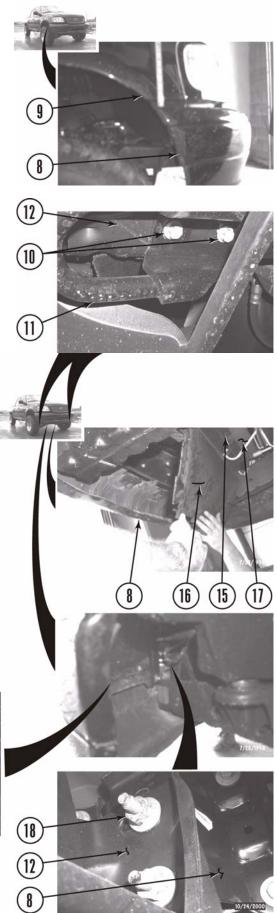
## B. Get ready to install the kit.

- 1. Remove the front bumper.
  - a. Measure distance between the front bumper (8) and front fenders (9). Record measurement.

b. If so equipped, remove four bolts (10) and two tow hooks (11) from frame (12) ends.

- c. If so equipped, remove two connectors (13) from fog lamps (14).
- d. Remove eight panel clips (15) and air flap (16) from front bumper (8) and core support (17).
- e. Remove four nuts (18) and front bumper (8) from frame (12).

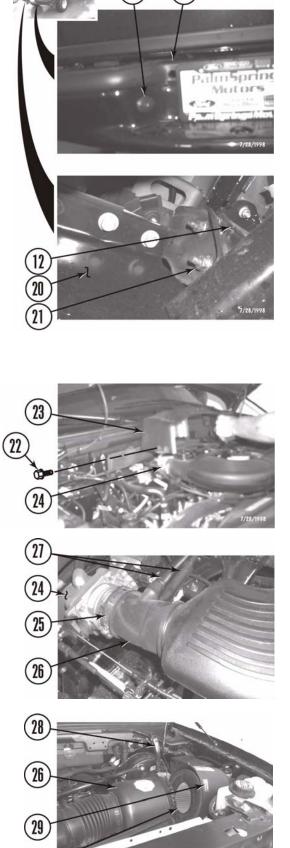




- 2. Remove the rear bumper.
  - a. Disconnect two license plate lights (19) from the rear bumper (20).

b. Remove four nuts (21) and rear bumper (20) from frame (12).

- 3. Under the hood.
  - a. Remove three screws with captive washers (22) and fuel injection cover (23) from the throttle body (24).
  - b. Remove clamp (25) from air duct (26) and throttle body (24).
  - c. Remove two hoses (27) from air duct (26) and throttle body (24).
  - d. Loosen clamp (28) and remove air duct (26) from air filter housing (29). Move move air duct out of way.
  - e. Remove air filter (30) from air filter housing (29) and set aside.



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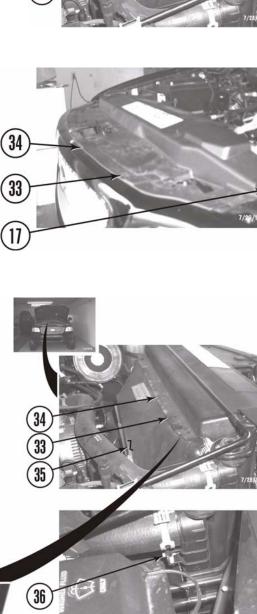
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Remove spare tire crank (31) from clips (32). f.

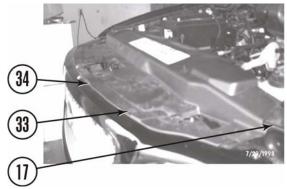
Remove seven screws (33) from radiator shroud g. (34) and core support (17).

h. Remove two screws (33) and radiator shroud (34) from fan shroud (35).

- Remove two screws (36) from fan shroud (35) i. and radiator (37).
- Pull radiator shroud (34) up and back from fan j. shroud (35), off of two top click-in mounting tabs (38). Rest fan shroud on fan.





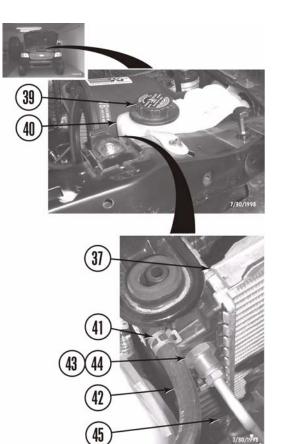


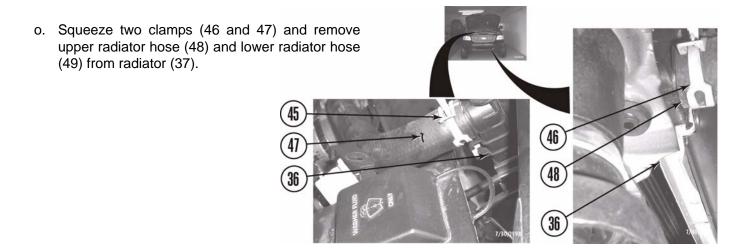
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## **MWARNING**

Ensure radiator has cooled completely before removing radiator cap. Radiator coolant is HOT and UNDER PRESSURE. Serious personal injury may result if cap is removed before radiator has cooled.

- k. Remove radiator cap (39) from overflow bottle (40).
- I. Drain radiator (37) into a clean container.
- m. Squeeze clamp (41) and remove hose (42) from radiator (37).
- n. If equipped with automatic transmission, remove two snap off line covers (43) (if so equipped / not shown) and remove transmission cooling lines (44 and 45).





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- p. Remove two bolts with captive washers (50), four brackets (51 and 52), and radiator (37) from core support (17). Set radiator aside.
- q. Remove fan shroud (35) from vehicle and set aside.
- Remove clip (53) from lines (54 and 55). Clip will r. not be reused.
- s. Loosen nut (56) from stud (57) so bracket (58) moves freely.

- t. Remove line (59) from clip (60) on frame (12) driver side.
- u. Remove three screws (61) and transmission cooler (62) from the core support (17).
- v. Remove two screws (63) and power steering cooler (64) from the core support (17).
- w. Remove clip (65) from lines (59 and 66). Clip will not be reused. 57
- x. Remove bolt (67) from the core support (17).

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4. Along the frame rails.

#### **∕**∆NOTE

Step 4.a. is only for vehicles with the brake module mounted on the frame. Other models skip this step. You may find it easier to remove the brake module if you first remove the driver side inner fender, but this is not strictly necessary.

- a. Remove three bolts (68) and brake module (69) from bracket (70).
- b. Remove line (59) from clip (71) on frame (12) driver side.
- c. Remove clip (72) and line (59) from frame (12) driver side.

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d. Remove two clips (73) and harness (74) from frame (12) driver side.

e. Remove bolt (75) and safety cable (76) from frame (12) driver side.

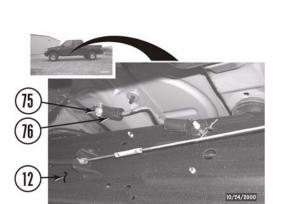
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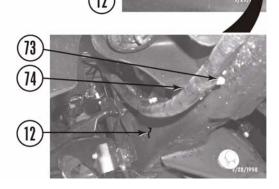
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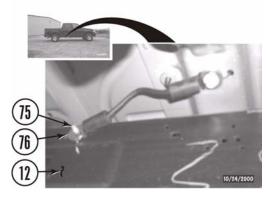






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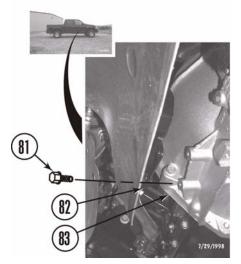
h. Remove bolt (75) and safety cable (76) from frame (12) passenger side.



#### **∧**NOTE

Step 5 is only for vehicles with the automatic transmission shown. Other models skip this step.

- 5. Under the cab.
  - a. Remove two bolts (81) and shift cable bracket (82) from transmission (83).

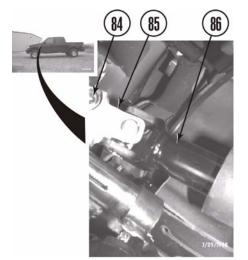


6. Inside the cab.

## **∧**NOTE

Ensure steering shaft does not turn independently of the steering gearbox. This could cause the air bag system to malfunction, resulting in serous personal injury or damage to the equipment.

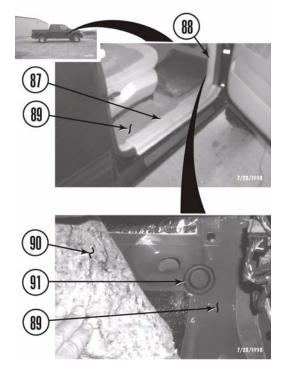
- a. Straighten steering wheel and strap the wheel so it will not turn.
- b. Loosen bolt (84) from the steering u-joint (85) under the dash, slide u-joint down to remove from steering wheel shaft (86).



#### ∧NOTE

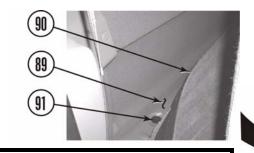
Step 6.c. and 6.d. are for regular, extended, and crew cab models.

- c. Remove two scuff plates (87) and two kick panels (88) from front of cab floor (89).
- d. Pull carpet (90) away and remove two rubber caps (91) from front of cab floor (89).



Step 6.e. and 6.f. are for regular cab models only. Other models skip these steps.

- e. Remove three nuts (92) from studs (93) and tray (94) from rear of cab floor (89).
- f. Fold carpet (90) forward and remove two rubber caps (91) from cab floor (89).

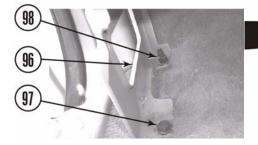


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#### **∧**NOTE

Steps 6.g. through 6.k. are for extended cab models only. Other models skip these steps.

- g. Remove two scuff plates (95) from rear of cab floor (89).
- h. Fold rear seat bottom (96) forward and remove two bolts (97) from rear seat and cab floor (89).



- i. Remove three bolts (97), three nuts (98), and rear seat bottom (96) from studs (99) and cab floor (89).
- j. Fold carpet (90) forward and remove two rubber caps (91) from cab floor (89).
- k. Reach under carpet (90) and remove two rubber caps (91) from cab floor (89) just behind front seat. Carpet can be "tented" and caps removed without further carpet removal.

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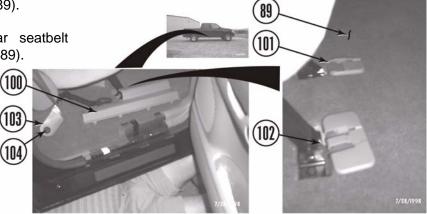
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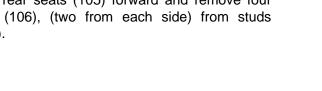
Steps 6.I. through 6.o. are for Super Crew models only. Other models skip these steps.

- Remove two scuff plates (100) and three covers Ι. (101 and 102) from rear of cab floor (89).
- m. Remove two bolts (103) and rear seatbelt tiedowns (104) from rear of cab floor (89).



n. Reach under carpet (90) and locate two bolts (97). It's a squeeze, but carpet can be "tented" and bolts removed from rear of cab floor (89) without further carpet removal.

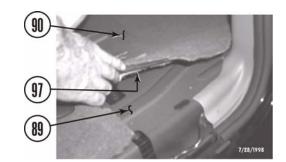
o. Fold rear seats (105) forward and remove four nuts (106), (two from each side) from studs (107).

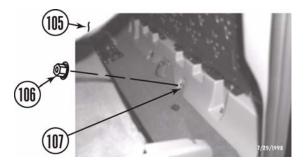


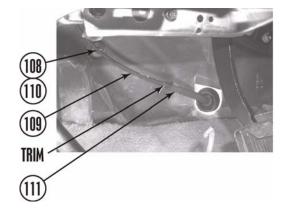
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Step 6.o. is for automatic transmission/5.4 liter engine usually. Sometimes the 4.6 liter engines have this transmission too and there's no consistency. Sorry.

p. Remove nut (108) and shift cable (109) from stud (110) under the dash. Cable will slide through floor of cab when cab is lifted. If cable is tight after lifting, trim some rubber off end of boot (111) as shown.







Step 6.p. is for manual transmission vehicles only. Other models skip this step.

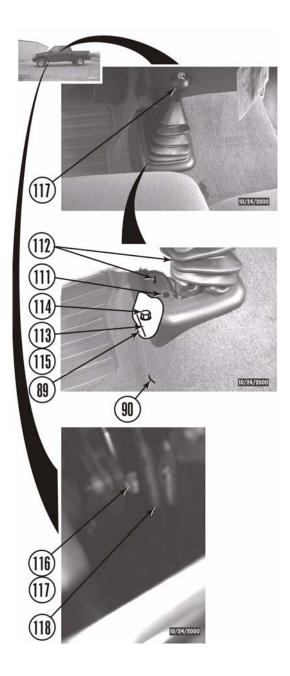
q. Ensure shifter is in neutral before lifting the cab.

#### ∧NOTE

Step 6.r. through 6.u. are for 4wd vehicles only. Other models skip these steps.

- r. Remove four screws (112) and outer shift boot (113) from inner housing (114). Pull boot up and out of way.
- s. Remove four bolts (115) and inner shift boot (116) from cab floor (89). Pull boot up through hole in carpet (90) and out of way.

- t. Remove bolt (117) and transfer case shift lever (118) from linkage (119).
- u. Carefully remove two shift boots (113 and 116) from transfer case shift lever (118).

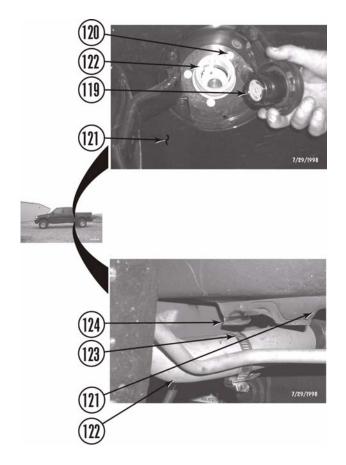


## **WARNING**

Use extreme caution when working near fuel lines and fuel tank. Clean up spilled fuel immediately. Any spark could cause an explosion or fire resulting in serious personal injury and property damage.

- 7. Remove the fuel filler.
  - a. Remove gas cap (119).
  - b. Remove three bolts (120) from bed (121) and fuel filler (122).

c. Remove clamp (123) from fuel filler (122) and tongue (124) and let fuel filler neck drop down from the bed (121).



1. Prepare to lift cab from frame.

#### **WARNING**

Failure to replace the OEM body mounting hardware (except mounting bolts in the kit) in the stock locations could result in serious personal injury or damage to the vehicle.

a. Measure distance between the cab (125) and the bed (121). Record measurement for later cab to bed alignment reference in these instructions.

#### **≜NOTE**

Ford uses an extremely cohesive thread locker on cab and bed mounting bolts. This is no problem on the bed and core support mounting points, but the cab mounting bolts screw into the lower bushings and with the thread locker these are difficult to remove. There are three ways to do this: a friend with a big pair of channel locks to hold the lower bushings while you unscrew the cab mounting bolts, heating the thread locker (not recommended), and pressing the bottom bushings one at a time against the cab bottom with a hydraulic jack and wooden block. You will encounter much resistance from the thread locker the whole time you are turning the bolts, and air tools really don't work well on this application.

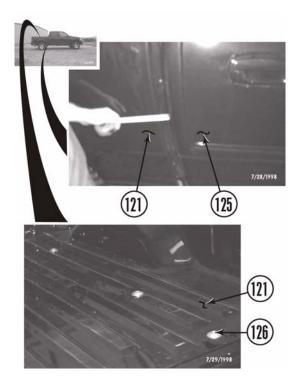
#### **∆NOTE**

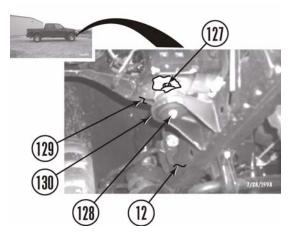
You need a T-47 Torx head socket to remove the bed mounting bolts.

- b. Remove six (eight long bed) bed mounting bolts (126) from bed (121) and frame (12).
- c. Slide bed (121) back from cab (125) approximately 1". Ensure fuel filler (122) does not hang up on bed.
- d. Hold nuts (127) and loosen but do not remove two cab mounting bolts with captive washers (128) from core support mounting pad (129) and passenger side frame mounting pad (130).
- e. Hold lower bushings (131 & 206) and loosen but do not remove six cab mounting bolts (132, 133, and 134) (see next page for locations).

## **MWARNIN**G

Use extreme caution when lifting body from frame. Ensure lifting device is securely placed. Keep hands out from between frame and body, or serious personal injury could result.





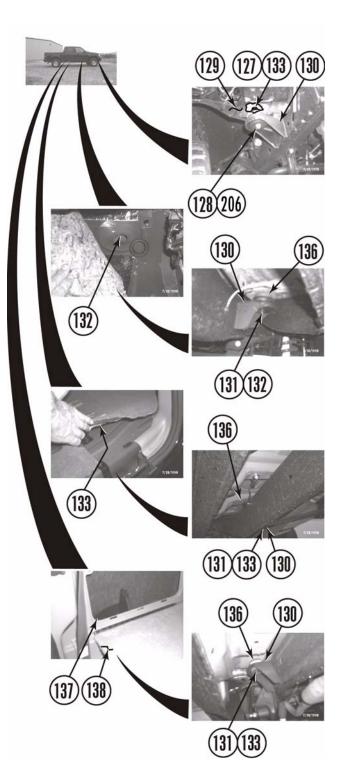
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Continually check hoses, wires, lines, etc. to be sure that everything is flexing properly and not binding, or damage to the vehicle could result. Be especially careful of the A/C hoses at the firewall, the belt pulley, and at the core support. Ensure brake lines stretch while lifting. Bending the lines to gain ample slack may be necessary. Be extremely careful not to kink the lines.

#### **∆NOTE**

Ensure stock spacers and body mounting <u>pads stay on</u> <u>vehicle</u> unless otherwise specified in these instructions. *Kit* spacer blocks are installed <u>in addition</u> to the stock spacers and body mounting pads.

- f. Remove bolt with captive washer (128), lower bushing (206), nut (127), and washer (135) from the passenger side core support mounting pad (129) and passenger side frame mounting pad (130).
- g. Remove bolt with captive washer (132) and lower bushing (131) from the passenger side frame mounting pad (130) and cab mounting pad (136).
- h. Extra cab and crew cab models slide ratchet under carpet (90) and remove bolt with captive washer (133) and lower bushing (131) from the passenger side frame mounting pad (130) and cab mounting pad (136).
- i. **Extra cab and single cab models** remove bolt with captive washer (133) and lower bushing (131) from the passenger side frame mounting pad (130) and cab mounting pad (136).
- j. **Crew cab models** fold rear passenger seat forward. Open door (137) and remove jack and jack handle. Pull plastic (138) forward and remove bolt with captive washer (134) and lower bushing (131) from the passenger side frame mounting pad (130) and cab mounting pad (136).

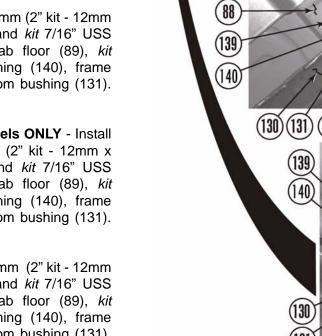


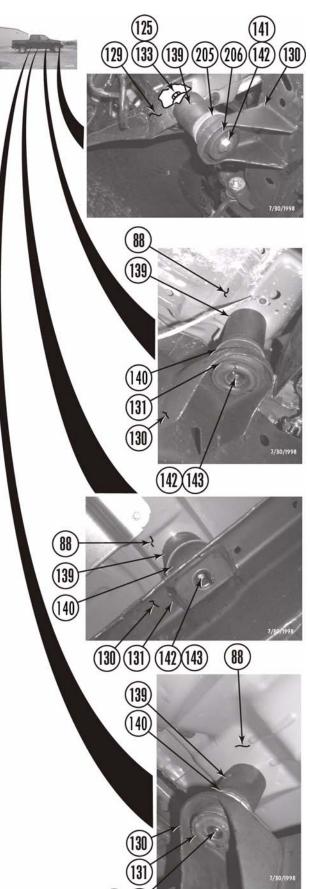
- 2. Lift cab and install cab passenger side spacer blocks.
  - a. Using a hydraulic jack and a wooden block, <u>slowly</u> lift the cab (125) passenger side just high enough to position the *kit* spacer blocks (139) between the core support mounting pads (129) and frame mounting pads (130).

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ONLY DRILL OUT FRONT CORE SUPPORT UPPER AND LOWER BUSHINGS as directed in the following procedure. Core support mounts are forward most cab mounts. Drilling any other cab mount bushings will not allow for proper installation of kit.

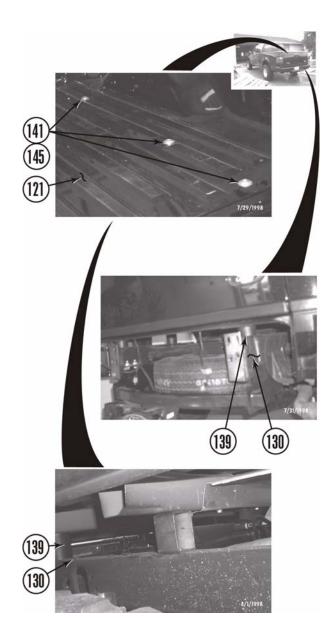
- b. Using a 1/2" drill bit, drill the threads out of the core support top and bottom bushings (205 and 206).
- c. Position four (three single cab) *kit* spacer blocks (139) on top of the passenger side frame mounting pads (130).
- d. Install a *kit* 12mm x 1.75 x 180mm (2" kit 12mm x 1.75 x 160mm) bolt (141) and *kit* 7/16" USS washer (142) through the bottom bushing (206), frame mounting pad (130), top bushing (205), *kit* spacer block (139), cab passenger side core support mounting pad (129), washer (135) and nut (127). Do not tighten.
- e. Install a *kit* 12mm x 1.75 x 140mm (2" kit 12mm x 1.75 x 120mm) bolt (143) and *kit* 7/16" USS washer (142) through the cab floor (89), *kit* spacer block (139), top bushing (140), frame mounting pad (130), and bottom bushing (131). Do not tighten.
- f. Extra cab and crew cab models ONLY Install a kit 12mm x 1.75 x 140mm (2" kit - 12mm x 1.75 x 120mm) bolt (143) and kit 7/16" USS washer (140) through the cab floor (89), kit spacer block (139), top bushing (140), frame mounting pad (130), and bottom bushing (131). Do not tighten.
- g. Install a *kit* 12mm x 1.75 x 200mm (2" kit 12mm x 1.75 x 180mm) bolt (144) and *kit* 7/16" USS washer (142) through the cab floor (89), *kit* spacer block (139), top bushing (140), frame mounting pad (130), and bottom bushing (131). Do not tighten.
- h. Lower cab (125) on the *kit* spacer blocks (139).





3. Install the cab driver's side spacer blocks.

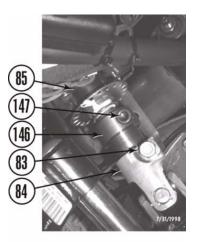
- Repeat steps C.1.f. through j. and C.2.a. through h. for the cab driver's side, ensuring harness (74) (see step B.4.e.) goes behind spacer block (139) behind wheel well.
- 4. Finish the cab spacer block installation.
  - a. Adjust cab to bed clearance using the measurements from step C. 1. a.
  - Remove eight bolts (141, 143, and 144) one at a time, coat threads with Loctite®, and install. Tighten to 55 lb-ft.
- 5. Install the bed passenger side spacer blocks.
  - a. Slide the bed (121) back toward the cab (125) approximately 1".
  - b. Lift the bed (121) passenger side just high enough to position three (four long bed) *kit* spacer blocks (139) on the frame mounting pads (130).
  - c. Install three (four long bed) kit 12mm x 1.75 x 180mm (2" kit 12mm x 1.75 x 160mm) bolts (141) and kit 1 3/4" thick washers (145) through the bed (121), kit spacer blocks (139), and the frame mounting pads (130). Do not tighten.
  - d. Lower the bed (121) onto the spacer blocks (139).
- 6. Install the bed driver side spacer blocks.
  - a. Repeat steps C. 5 a. through d. for the bed driver side.
- 7. Finish the bed spacer block installation.
  - a. Adjust the cab to bed clearance using the measurements from step C. 1. a.
  - Remove six (eight long bed) bed mounting bolts (141) one at a time, coat threads with Loctite®, and reinstall. Tighten to 55 lb-ft.

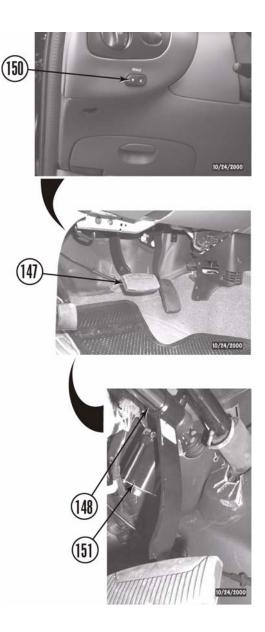


- 8. Inside the cab. Install the steering extension.
  - a. Position *kit* steering extension (146) in the steering u-joint (85) and tighten bolt (84) to 33 lb-ft.
  - b. Slide *kit* steering extension (146) up onto steering wheel shaft (86).
  - c. Ensure steering wheel has not turned and tighten *kit* bolt (147) to 33 lb-ft.

Steps 9.c. and 9.d. are for moveable pedal vehicles only. Other models skip these steps.

- d. Grasp brake pedal (148) and push to the left enough to bend pedal mounting bracket (149) *slightly.*
- e. Operate pedal button (150). Ensure when brake pedal (148) is all the way forward against firewall pedal does not contact steering u-joint (85) or solenoid (151).





#### **MWARNING**

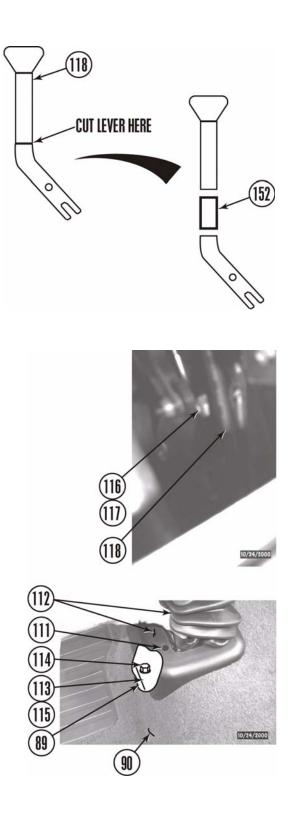
Be careful not to damage any of the parts attached to the shift levers during cutting and welding or damage to the equipment could result. A certified welder should perform all welding.

#### MOTE

Steps 10.a. through 10.f. are for 4wd vehicles only. Other models skip these steps.

- 9. Lengthen and install the transfer case shift lever.
  - a. Scribe a line along the side of the transfer case shift lever (118) (above the bend) as shown. Cut the lever into two pieces through the line and deburr as necessary.
  - b. Position *kit* transfer case shift lever extension (152) between the two pieces of the transfer case shift lever (118). Ensure the extension and lever scribed lines align and weld the extension in place.
  - c. Slide outer shift boot (113) and inner shift boot (116) on transfer case shift lever (18).
  - Install transfer case shift lever (118) on linkage (119) with bolt (117). Check transfer case shift lever operation.

- e. Position inner shift boot (116) through hole in carpet (90) and install on cab floor (89) with four bolts (115).
- f. Install outer shift boot (96) on cab floor (88) with four screws (112).



10. Install carpet and seats.

## ∧NOTE

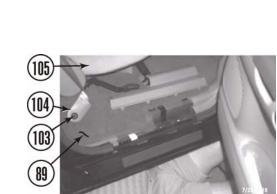
Steps 10.g. through 10.j. are for Super Crew models only. Other models skip these steps.

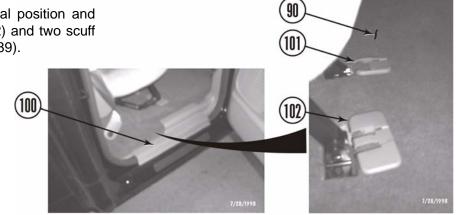
- a. Install jack and jack handle and close door (137).
- 13)

b. Install four nuts (106) on studs (107).

c. Fold rear seats (105) back and install two rear seatbelt tiedowns (104) in cab floor (89) with two bolts (103).

d. Smooth carpet (90) to it's original position and install three covers (101 and 102) and two scuff plates (100) on rear of cab floor (89).





21

105

107

(106)

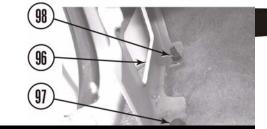
Step 10.k. and 10.l. are for regular cab models only. Other models skip these steps.

- e. Install two rubber caps (91) in rear of cab floor (89) and smooth carpet (90) to it's original position.
- f. Install tray (94) on three studs (93) and rear of cab floor (89) with three nuts (92).

90

89

g



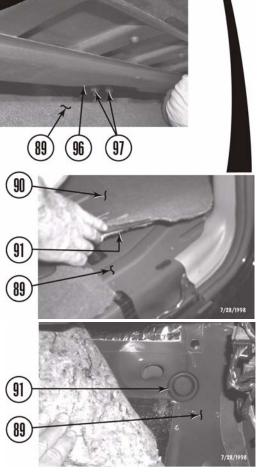
#### ∧NOTE

Step 10.m. through 10.o. are for extended cab models only. Other models skip these steps.

- g. Install two rubber caps (91) in cab floor (89) just behind front seat.
- Install two rubber caps (91) in rear of cab floor (89) and smooth carpet (90) to it's original position. Install two scuff plates (95).
- Install rear seat bottom (96) on studs (99) and cab floor (89) with three bolts (97) and three nuts (98).

∧NOTE					
Step	10.p. and 10.q. are for all models.				

j. Install two rubber caps (91) in front of cab floor (89) and smooth carpet (90) to it's original position.



89

91

94

96

(89)

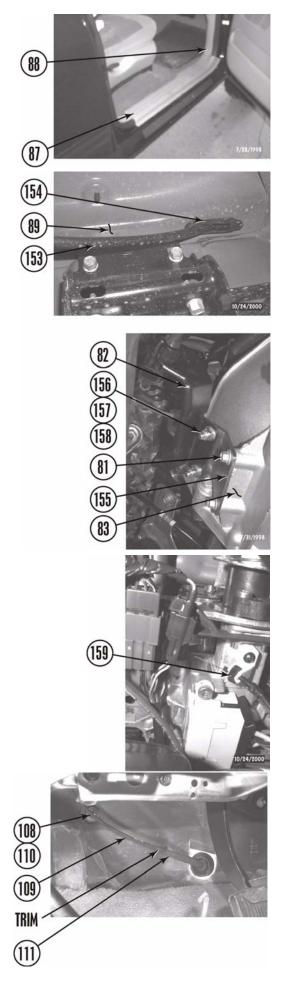
95)

- k. Install two kick panels (88) and two scuff plates (87).
- 11. Under the cab.
  - a. Check the parking brake cable (153) to ensure it slid down through the grommet (154) in the cab floor (89). Ensure grommet is correctly positioned in cab floor.

Steps 11.b. through 11.d. are for automatic transmission/4.6 liter engine models only. Other models skip these steps.

- b. Install *kit* bracket (155) on transmission (83) with two bolts (81).
- c. Install shift cable bracket (82) on *kit* bracket (155) with two *kit* 5/16 x 1" bolts (156), four 5/16" SAE washers (157), and two 5/16" nylock nuts (158).
- d. If the transmission shift indicator pointer on the column is now off, adjust it using the wheel (159) under the dash until the pointer points correctly to all shift ranges. This may not be possible, so you will have to find a happy medium.

e. If possible, slide nut (108) up shift cable (109) and install on stud (110). Slide cable down into boot (111). If cable is still tight after lifting, trim some rubber off the end of the boot.



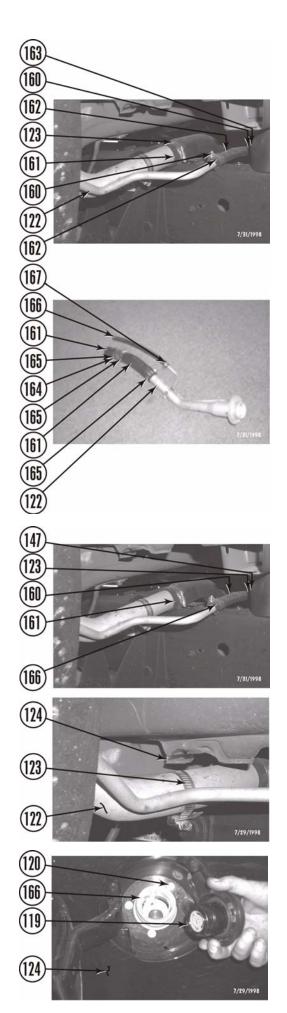
#### **MWARNING**

Use extreme caution when working near fuel lines and fuel tank. Clean up spilled fuel immediately. Any spark could cause an explosion or fire resulting in serious personal injury and property damage.

- 12. Install fuel filler.
  - a. Remove two clamps (123 and 160), filler hose (161), and vent hose (162) from gas tank (163).
  - b. Remove two clamps (123 and 160) and fuel filler (122) from filler hose (161) and vent hose (162).
  - c. Cut filler hose (161) in half as shown.
  - d. Install half of filler hose (161), *kit* filler hose extension (164), and other half of filler hose (161) on fuel filler (122) with two *kit* #28 clamps (165) and clamp (123).
  - e. Install *kit* vent hose (166) on fuel filler (122) with *kit* #10 clamp (167).
  - f. Install *kit* vent hose (166) and filler hose (161) on gas tank (163) with two clamps (123 and 160).

g. Install fuel filler (122) on tongue (124) with clamp (123).

- h. Install fuel filler (166) on the bed (121) with three bolts (120).
- i. Install gas cap (119).



13. Along the frame rails.

#### **∆NOTE**

Step 13.a. is only for vehicles with the brake module mounted on the frame. Other models skip this step.

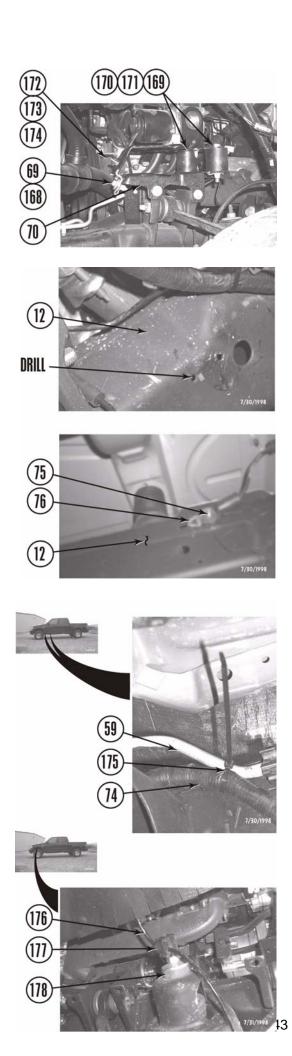
- a. Install *kit* brake module mounting bracket (168) on bracket (70) with bolt (69). Do not tighten.
- b. Install two 2" x 2" kit spacers (169) and brake module (69) on bracket (70) with two kit 10mm x 1.50 x 80mm bolts (170), two kit 7/16" SAE washers (171), kit 1/4" x 1" bolt (172), two kit 1/4" SAE washers (173), and kit 1/4" nylock nut (174). Tighten bolts.
- Measure 1" forward of the holes on each side of the frame (12) from which you removed the bolts (75) and safety cables (76).

#### **WARNING**

Ensure the drill does not contact fuel and brake lines inside the frame.

- d. Mark and drill a 1/2" hole on each side of the frame (12).
- e. Install safety cable (76) in new hole in the frame (12) driver side with bolt (75).
- f. Secure harness (74) to line (59) with two *kit* zip ties (175).

g. Ensure there is enough slack in line (176) though grommet (177) on driver side shock tower (178) so wheel travel will not break line. If line does not have enough slack, pull some line through grommet towards wheel.



h. Install safety cable (76) in new hole in the frame (12) passenger side with bolt (75). 75 i. Install kit bracket (179) on frame (12) passenger side with bolt (79). Install ground strap (80) on kit bracket (179) with (172) j. kit 1/4 x 1" bolt (172), two kit 1/4" SAE washers (173), and kit 1/4" nylock nut (174). **MOTE** Steps 13.k. and 13.l. are for vehicles with the chassis ground on the frame behind the wheel. k. Install kit bracket (180) on frame (12) passenger side with bolt (77). 180 Bend bracket (78) 90 degrees as shown and Ι. install on kit bracket (180) with kit 1/4 x 1" bolt (172), two kit 1/4" SAE washers (173), and kit 1/ 4" nylock nut (174). Ensure negative battery cable (181) will reach battery (3). Steps 13.m. and 13.n. are for vehicles with the chassis ground on the frame in front of the wheel. m. Install kit bracket (182) on frame (12) passenger side with bolt (77). n. Install bracket (78) on kit bracket (182) with kit 1/ 4 x 1" bolt (172), two kit 1/4" SAE washers (173), and kit 1/4" nylock nut (174). Ensure negative battery cable terminal (181, not shown) will reach battery (3). o. Ensure there is enough slack in line (183) though grommet (184) on passenger side shock tower (185) so wheel travel will not break line. If line does not have enough slack, pull some line through grommet towards wheel.

45

37

41

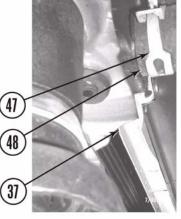
- 14. Under the hood.
  - a. Cut top click-in mounting tabs (38) and lower mounting tabs (186) off of the fan shroud (35).

- b. Position fan shroud (35) in vehicle and rest on fan.
- c. Install radiator (37) and four brackets (51 and 52) on core support (17) with two bolts with captive washers (50).
- d. Squeeze two clamps (46 and 47) and install upper radiator hose (48) and lower radiator hose (49) on radiator (37).

e. If removed, install two automatic transmission cooling lines (44 and 45). If removed, install two snap on line covers (43).

37

f. Squeeze clamp (41) and install hose (42) on radiator (37).





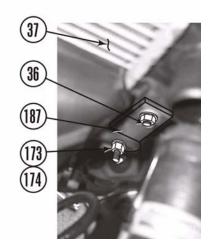




g. Fill radiator (37) and replace radiator cap (39). Radiator must be topped off after vehicle is started.

- h. Install two *kit* fan shroud mounting brackets (187) on radiator (37) with two screws (36). Do not tighten.
- Install fan shroud (35) on *kit* mounting brackets (187) with two *kit* 1/4" SAE washers (173) and *kit* 1/4" nylock nuts (174). Do not tighten.
- j. Check fan to fan shroud clearance. Ensure gap is the same all around shroud and tighten screws (36) and nuts (174).

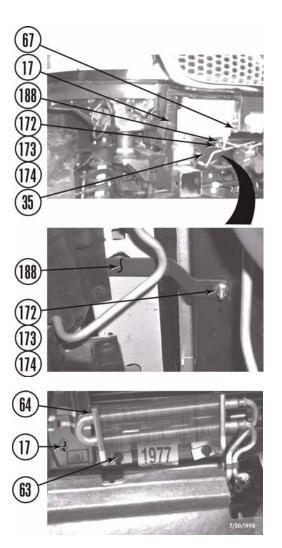




## **∕**∆NOTE

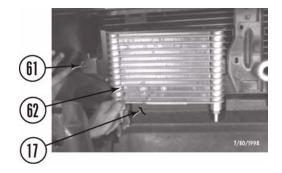
This kit contains two different lower fan shroud brackets, one for the early models and one for the later models. Test fit both brackets and install the one that works best.

- k. Install *kit* lower fan shroud support bracket (188) on core support (17) with bolt (67).
- I. Using the *kit* lower fan shroud support bracket (188) as a template, mark and drill a 5/16" hole in the fan shroud (35).
- m. Install fan shroud (35) on *kit* bracket (188) with *kit* 1/4 x 1" bolt (172), two *kit* 1/4" SAE washers (173), and *kit* 1/4" nylock nut (174). Ensure bolt (172) threads point out of shroud. Turn fan by hand and ensure fan does not contact fan shroud.
- n. Install power steering cooler (64) on core support (17) with two screws (63) (lines may need to be carefully bent in order to clear).



#### **∕∆NOTE**

On some later model vehicles, the transmission cooler hard lines are too short to install the transmission cooler in it's original location. Step 14.p. and 14.q. are for these vehicles.



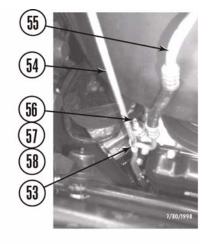
DRILL

17

- o. If possible, install transmission cooler (62) on core support (17) with three screws (61).
- p. Using transmission cooler (62) as a template mark and drill two new holes on core support (17) with 5/16" drill.
- q. Install transmission cooler (62) on core support (17) with two *kit* 1/4 x 1" bolts (172), four *kit* 1/4" SAE washers (173), and two *kit* 1/4" nylock nuts (174).

- r. Tighten nut (56) and bracket (58) on stud (57).
- s. Carefully bend lines (54 and 55) so they clear fan shroud (35) and do not rub on anything.

t. Install lines (54, 55, and 59) in clips (53 and 60) when possible.





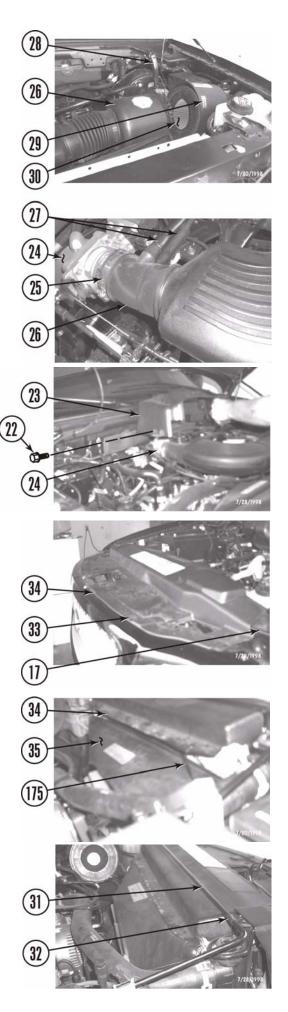
u. Position air filter (30) in air filter housing (29). Position air duct (26) on air filter housing (29) and tighten clamp (28).

- v. Tighten clamp (25) on air duct (26) and throttle body (24).
- w. Install two hoses (27) on air duct (26) and throttle body (24).
- x. Install cover (23) on throttle body (24) with three screws with captive washers (22).

y. Install radiator shroud (34) on core support (17) with seven screws (33).

z. Tie radiator shroud (34) on fan shroud (35) with two *kit* zip ties (175).

aa. Replace spare tire crank (31) in clips (32).



#### **WARNING**

The following procedure is intended <u>only</u> to enhance the appearance of the vehicle. The rear bumper will no longer be rated for towing of any kind. Towing with the rear bumper after it has been lifted can result in death, serious personal injury, or damage to the vehicle. Towing after the bumper has been lifted should be accomplished using a rated Class III receiver type hitch.

- 15. Install the rear bumper.
  - a. Coat threads of bolts (190) and nuts (21) with Loctite®.

#### ∧NOTE

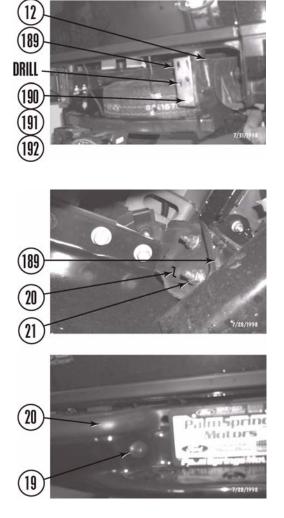
For 2" kits, the rear bumper is installed in the stock location, or can be raised by drilling new holes in the frame end caps. Step 15.b. is for 2" kits only. 3" kit installation, skip this step.

b. Install rear bumper (20) on frame (12) with four nuts (21).

#### **∧**NOTE

Steps 15.c. through 15.i. are for 3" kits only. 2" kit installation, skip these steps.

- c. Position two *kit* brackets (189) on frame (12) and install two *kit* 7/16 x 1 1/2" bolts (190), four *kit* 7/16" USS washers (191), and two *kit* 7/16" nylock nuts (192). Hand tighten.
- d. Mark frame (12) in center of holes in *kit* brackets (189) as shown. Remove *kit* brackets from frame.
- e. Drill two holes in frame (12) as shown. Elongate holes horizontally for bumper adjustment.
- f. Position two *kit* brackets (189) on frame (12) and install four *kit* 7/16 x 1 1/2" bolts (190), eight *kit* 7/ 16" USS washers (191), and four *kit* 7/16" nylock nuts (192). Do not tighten.
- g. Position rear bumper (20) on kit brackets (189) and install four nuts (21). Do not tighten.
- h. Adjust bumper to body clearance and tighten bolts (190) and nuts (21) to 55 lb-ft.
- i. Connect two license plate lights (19) in rear bumper (20).



- 16. Install the front bumper.
  - a. Coat threads of bolts (190) and nuts (18) with Loctite®.

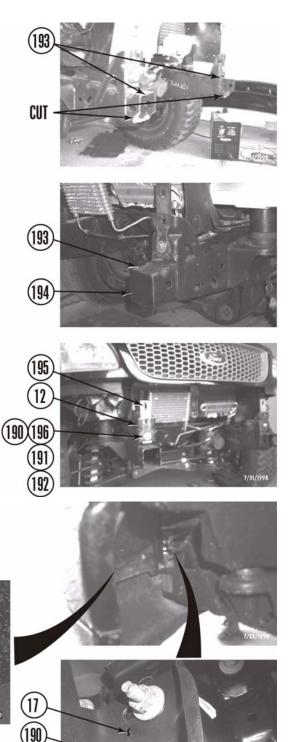
Step 16.b. is for vehicle years 1997 through 2002. 2003 vehicles skip this step.

b. Cut material from the front frame horns (193) as shown. Remove enough metal so bottom of bumper will clear.

#### ∧NOTE

Steps 16.c. is for vehicle year 2003. Other vehicles skip this step.

- c. Install two *kit* frame caps (194) in ends of frame horns (193).
- d. Install two *kit* brackets (195) on frame (12) behind stock mounts as shown with two *kit* 7/16 x 1 1/2" bolts (190), two *kit* 7/16" USS washers (191), two *kit* thick washers (196), and two *kit* 7/ 16" nylock nuts (192).
- e. Install front bumper (8) on frame (12) and *kit* brackets (195) with four nuts (18). Do not tighten.



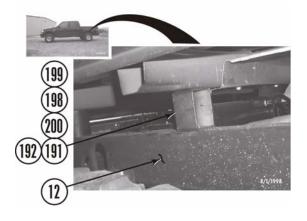
- 14 13 10/24/2000
- f. Adjust bumper to body clearance and tighten bolts (190) and nuts (18) to 55 lb-ft.
- g. If removed, connect two connectors (13) on fog lamps (14).
- Install air flap (16) on front bumper (8) and core support (17) with eight *kit* panel clips (197). Some trimming around hard lines may be necessary.

8

## 

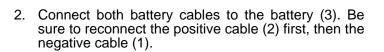
A certified welder should perform all welding.

- 17. Install bed crush blocks.
  - a. **Early models** Weld two (four long bed) *kit* bed overload spacers (198) on the frame (12) over the rear wheel wells as shown.
  - b. Late models Remove two (four long bed) plastic bumpers (199) and install two (four long bed) *kit* bed overload spacers (197) on the frame (12) two (four long bed) *kit* 7/16 x 1" bolts (200), two *kit* 7/16" USS washers (191), and two *kit* 7/ 16" nylock nuts (192).



## D. After installation is complete.

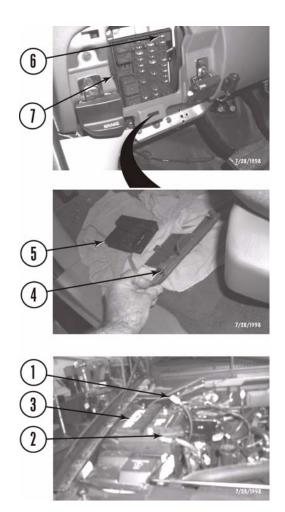
1. Install airbag fuse (6) in fuse panel (7). Install two covers (4 and 5).



- 3. Stick *kit* warning sticker on the dash in plain sight of all vehicle occupants.
- 4. Double check the vehicle.

#### 

Retorque all fasteners after 500 miles and after off road use. All body lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.



- a. Check all mounting hardware to ensure it is properly tightened.
- b. Check all wires, hoses, cables, etc. to ensure they have been properly connected and there is ample slack. With the number of hoses on this vehicle, it is vital that this be checked thoroughly.
- c. Check vehicle electrical system.
- d. Start vehicle and check the steering in both directions to ensure that there is no bind. Check clutch operation. Check the operation of the brake system and the parking brake. Check both shift levers' operation. Ensure that there is proper engagement in all gears and 4 wheel drive ranges.

#### 

Never open a closed cooling system after the vehicle has been started. Only fill the cooling system if the cap has been removed while the vehicle was still cold.

- e. Check coolant level. Fill coolant to the proper level (refer to the Owner's Manual).
- f. Test drive vehicle in all gears and 4 wheel drive ranges. Pay close attention to all vehicle systems. Check all hardware again in 500 miles and as part of your regular maintenance schedule.

## 

Performance Accessories does not recommend any particular wheel and tire combinations for use with its body lifts and cannot assume responsibility for the customer's choice of wheels and tires. Reference your owner's manual for recommended tire sizes and warnings related to the use of oversized tires. Larger wheel and tire combinations increase stress and wear on steering and suspension components, which leads to increased maintenance and higher risk for component failure. Larger wheel and tire combinations also alter speedometer calibration, braking effectiveness, center of gravity, and handling characteristics. Consult with an experienced local off road shop to find what wheel and tire combinations work best with your vehicle.

#### **∆NOTE**

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the <u>vehicle owner</u>. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to his vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

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## E. 3" Kit Parts List.

Quantity	Descript	ion	
	Kit		
16	3" x 3" blocks		
2	2" x 2" ł	plocks	
2		ter bumper brackets	
2	Rear bumper brackets		
4	Cab spacers with holes		
1	-	as filler extension	
1	$16^{\circ} \times 1/2^{\circ}$ vent hose		
1			
1	Warning to driver sticker		
1	Logo sticker		
1	6ml bottle Loctite		
1	Lower fan shroud bracket, late model Transmission bracket		
-			
2		e frame caps	
1	_	<b>2k BP863</b>	
	10	12mm x 1.75 x 180mm bolts	
	2	12mm x 1.75 x 200mm bolts	
	4	12mm x 1.75 x 140mm bolts	
	8	7/16" USS washers	
	10	1 3/4" thick washers	
	1	se 3000 steering extension	
	1	3/8" x 1 1/4" socket head bolt	
1	Hardwar	e pack HP70043	
	Bolts		
	2 1	0mm x 1.25 x 80 bolts	
	6	7/16" x 1 1/2" bolts	
	4	7/16" x 1" bolts	
	2	5/16" x 1" bolts	
	7	1/4" x 1" bolts	
	Washers		
	14	7/16" USS washers	
	2	7/16" SAE washers	
	2	1 3/4" thick washers	
	4	5/16" SAE washers	
	16	1/4" SAE washers	
	Nuts		
	10	7/16" nylock nuts	
	2	5/16" nylock nuts	
	9	1/4" nylock nuts	
	Miscella	•	
	1	1/2" shift extension pin	
	2	3" long stud radiator brackets	
	2	short L-shaped brackets	
	1	ground strap bracket, late model	
	1	brake module bracket, late	
	1	model	
	1		
	1	#10 hose clamp	
	2	#28 hose clamps	
	2	Zip ties	
	8	panel clips	



L-shaped bracket



Transmission cable bracket



Lower fan shroud bracket



Fan shroud bracket



Front bumper outer bracket



Rear bumper bracket

## E. 2" Kit Parts List.

Quantity	Descript	ion	
	Kit		
16	2" x3" b	locks	
2	2" x 2" l	blocks	
2	Front ou	ter bumper brackets	
4	Cab space	cers with holes	
1	1 3/4" g	as filler extension	
1		2" vent hose	
1	Warning to driver sticker		
1	Logo sticker		
1	6ml bottle Loctite		
1	Fan shro	oud bracket, late model	
1	Transmission bracket		
2	Urethane frame caps		
1	Bolt pack BP862		
	10	12mm x 1.75 x 160mm bolts	
	2	12mm x 1.75 x 180mm bolts	
	4	12mm x 1.75 x 120mm bolts	
	8	7/16" USS washers	
	8	1 3/4" thick washers	
	1	SE3000 steering extension	
	1	3/8" x 1 1/4" socket head bolt	
1	Hardwar	re pack HP70042	
	Bolts	-	
	2	10mm x 1.25 x 80mm bolts	
	6	7/16" x 1 1/2" bolts	
	4	7/16" x 1" bolts	
	2	5/16" x 1" bolts	
	7	1/4" x 1" bolts	
	Washers	Vashers	
	14	7/16" USS washers	
	2	7/16 SAE washers	
	4	5/16" SAE washers	
	16	1/4" SAE washers	
	2	1 3/4" thick washers	
	Nuts		
	10	7/16" nylock nuts	
	2	5/16" nylock nuts	
	9	1/4" nylock nuts	
	Miscellaneous		
	1	1/2" shift extension pin	
	2	2" long stud radiator brackets	
	2	short L-shaped brackets	
	1	ground strap bracket, late model	
	1	brake module bracket, late	
		model	
	1	#10 hose clamp	
	2	#28 hose clamps	
	4	Zip ties	
	8	panel clips	



L-shaped bracket



Transmission cable bracket



Lower fan shroud bracket



Fan shroud bracket



Front bumper outer bracket