

FORD F150, F250, F350 BODY LIFT KIT INSTALLATION INSTRUCTIONS

2" Lift	
1992-96 F150	822
1992-97 F250*, F350*	822
3" Lift	
1992-96 F150	823
1992-97 F250*, F350*	823

* Except 1997 new body style

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.

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.

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.

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.

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. Before combining a body lift with a suspension lift, consult an installation professional to see how this will affect the vehicle.

A WARNING

The installation of larger tires may reduce the effectiveness of the Braking System.

Always wear eye protection when operating power tools.

A WARNING

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

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.

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.

Before Starting Installation

This kit does not fit vehicles with diesel engine.

This kit does not include rear bumper brackets and they are NOT available from Performance Automotive Group.

On vehicles with inline-6 or V6 engine, the lower radiator hose must be replaced with an aftermarket moldable hose to prevent it from contacting the smog pump.

Kit parts are prefaced by the word kit and appear in **bold** print.

- 1. Carefully read all warnings and instructions completely before beginning.
- 2. Verify all parts have been received in this kit by checking the parts list at the end of this document.

If parts are missing from kit, please be prepared to provide the following information:

- 1. Name of purchase location
- 2. Bar Code on side of box
- 3. Date above bar code
- 4. Date inside box cover
- 5. **Inspector #** from inside box cover
- 3. Only install this kit on the vehicle for which it is **specified.** If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-7080.
- 4. Special tools needed:
 - a. Die grinder or similar tool capable of cutting metal.
- 5. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.

Battery cables

1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.

Airbag fuse

1. If vehicle is equipped with an air bag, remove airbag fuse. Check owner's manual for fuse location.

Measurements

1. Measure and record distance between front bumper and fenders.

Driver Side _____Passenger Side _____

2. Measure and record distance between rear bumper and bed

Driver Side _____Passenger Side _____

3. Measure and record distance between cab and bed.

Driver Side _____Passenger Side _____

Prepare to Install Kit

Intake air duct

1. Remove intake air duct from top of radiator and throttle body.

Fan shroud

1. Remove two bolts securing fan shroud to top of radiator. Pull fan shroud up and out of clips that secure fan shroud to bottom of radiator.

Smog canister

 Remove two bolts securing smog canister to passenger side fender well. Move canister about 5" toward engine. Drill two new holes and install canister with stock hardware. This will allow the hose to reach the canister after cab has been lifted.

Steering shaft (under dash)

Some vehicles may be equipped with Supplemental Restraint System (SRS, or airbag). Accidental deployment of the airbag can result in serious personal injury or death. To avoid accidental deployment, the SRS must remain deactivated during installation of this kit. 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 kit installation, the SRS must be reactivated before driving the vehicle.

If the following step is not performed, the airbag clockspring could be damaged. Do not turn the steering wheel while the steering shaft is disconnected.

- 1. Strap steering wheel to prevent accidental movement.
- 2. Under the dash, remove bolt that secures steering shaft to "U"-joint. Slide steering shaft out of "U"-joint.

Front bumper

1. Loosen four bolts securing front bumper to front bumper brackets. Remove bolts securing front bumper brackets to frame horns. Remove front bumper.

Automatic transmission

1. The transmission is shifted via a cable. No modification is necessary.

Manual transmission

 The shift lever should simply drop down into the floor. It may be necessary to notch the floorboard after lifting cab (as specified later in this document). If necessary, remove hydraulic clutch line from its retaining clip on body.

Automatic-shift 4WD

1. "Shift-on-the-fly" is electronically controlled. No modification is necessary.

Manual-shift 4WD

1. The shift lever should simply drop down into the floor. It may be necessary to notch the floorboard after lifting cab (as specified later in this document).

Fuel filler

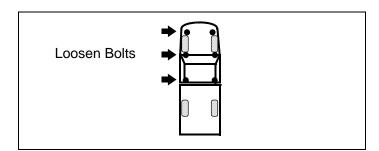
Use extreme caution when working near the fuel lines and the fuel tank. Clean up spilled fuel immediately. A spark could cause an explosion or fire resulting in serious personal injury and property damage.

1. Check fuel filler hose for ample flex and reach. Disconnect if necessary.

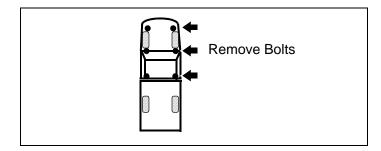
Install Kit

Cab

- 1. **Extended cab**: Pull the bottom of rear seat forward. Remove bolts holding rear seat cushion to floor. Remove rear seat cushion.
- 2. Pull carpet back to reveal access covers above body mount bolts. Remove access covers.
- 3. Loosen, but DO NOT remove, cab mounting bolts on driver side.



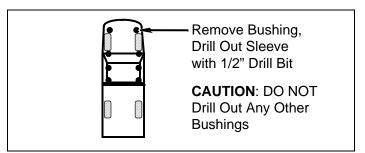
4. Remove cab mounting bolts from passenger side only.



Use extreme caution when lifting body from frame. To prevent serious personal injury, ensure the lifting device is securely placed. Keep your hands out from between the body and frame.

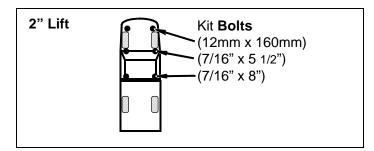
Continually check hoses, wires, lines, etc. to be sure that everything is flexing properly and not binding, or damage to the vehicle could result. Be especially careful of the A/C hoses at the firewall, the belt pulley, and at the core support. Ensure brake lines stretch while lifting. Bending the lines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

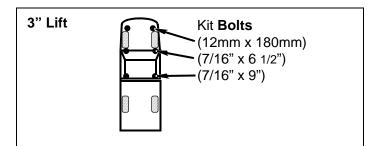
- 5. Using a hydraulic jack and a wooden block, slowly raise passenger side of cab just high enough to remove front body mount bushing near radiator.
- 6. Using a 1/2" drill bit, drill out the threads in bushing sleeve so kit **bolt** will fit through it. Reinstall bushing.



The kit **blocks** must be installed <u>in addition to</u> the factory bushings. Installing the kit **blocks** without the factory bushings could result in damage to the vehicle or serious personal injury.

 Place kit block (3" diameter) on top of bushing at each mount. Install kit bolts as shown. DO NOT tighten at this time.

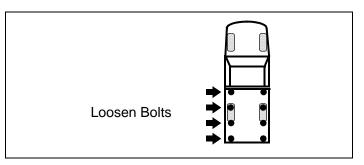




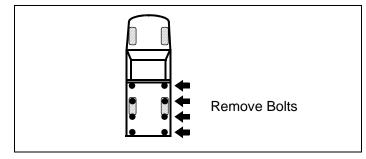
- 8. Lower the cab onto kit **blocks**.
- 9. Repeat previous steps for driver side of cab.
- 10. Set the position of cab in relation to bed according to measurements recorded earlier.
- 11. Remove each kit **bolt** one at a time, apply Loctite® to threads, and install kit **bolt** with factory washers. Tighten kit **bolts** to manufacturer's specification.
- 12. Install access hole covers on floor. Lay carpet back to its original position. Install kick panels and door jamb scuff plates.

Bed

1. Loosen, but DO NOT remove, bed mounting bolts on driver side.



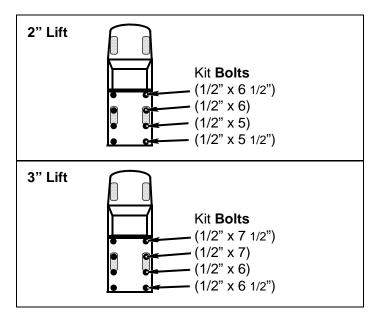
2. Remove bed mounting bolts from passenger side only.



Use extreme caution when lifting the bed from the frame. To prevent serious personal injury, ensure the lifting device is securely placed. Keep your hands out from between the bed and frame.

To prevent damage to the vehicle while lifting the bed, continually check hoses, wires, brake lines, etc. to ensure everything is flexing properly and not binding. Ensure clearance between bed and cab is maintained.

- Slowly raise passenger side of bed and place a kit block (3" diameter) on frame at each mount. DO NOT raise bed any more than necessary. A rivet at two of the mounts (one on each side) will prevent a 3" diameter kit block from being installed, so install 2" diameter kit blocks at those mounts.
- 4. At each mount, install a kit **bolt**, kit **washer** (1/2" USS), and kit **nut** (1/2" nylock). DO NOT tighten at this time.



5. Lower the cab onto the kit **blocks**.

- 6. Repeat previous steps for driver side of cab.
- 7. Set position of cab in relation to bed according to measurements recorded earlier.
- 8. Remove each kit **bolt** one at a time, apply Loctite® to threads, install, and tighten to manufacturer's specification.

Fuel filler

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

1. If fuel filler hose was disconnected, reconnect and adjust it as necessary.

Steering shaft

- 1. Install kit steering extension into "U"-joint.
- Apply Loctite® to threads of stock steering shaft bolt. Install bolt, ensuring it goes through relief slot on kit steering extension. This will prevent the kit steering extension from coming out of the "U"-joint. Tighten bolt to manufacturer's specification.
- 3. Install kit steering extension onto steering shaft.
- 4. Apply Loctite® to threads of kit **bolt** (3/8" x 1 1/4" Allen head). Install kit **bolt** in kit **steering extension**, ensuring it goes through relief slot on steering shaft. This will prevent the steering shaft from coming out of the kit **steering extension**. Tighten kit **bolt** to 33 ft. lbs.

Manual transmission

1. If transmission cannot be shifted into all gears, remove shift boot. Check shift operation again. Make a note of where shift lever contacts floor. Notch the floor to allow full engagement in all gears. Install shift boot.

Manual-shift 4WD

1. If necessary, notch the floor to prevent shift lever from contacting it.

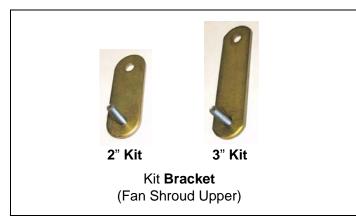
Lower radiator hose

If the engine cooling system is hot, the coolant will be HOT and UNDER PRESSURE. To prevent serious personal injury, wait until the cooling system is completely cool before removing the cap from the radiator.

1. **Inline-6 or V6 Engine**: Replace lower radiator hose with an aftermarket moldable hose. This will prevent the hose from contacting the smog pump.

Fan shroud

- 1. Automatic transmission: Carefully pull downward on transmission cooling lines to allow enough room for fan shroud to be lowered 3" (2" for a 2" kit).
- Install two kit brackets (fan shroud upper) in holes where fan shroud used to be installed using two stock bolts. Use two kit washers (1/4" SAE) as spacers between radiator and kit brackets. Be sure kit brackets cannot contact fins on radiator.



- 3. Install fan shroud on kit **brackets** with two kit **nuts** (1/4" nylock) and two kit **washers** (1/4" SAE). Adjust clearance between fan and fan shroud. Tighten securely.
- Remove center bolt securing fan shroud to bottom of core support. Install kit bracket (fan shroud lower) on core support. Drill a hole up through kit bracket and bottom of fan shroud. Install fan shroud on kit bracket using a kit bolt (1/4" x 1"), kit washers (1/4" SAE), and kit nut (1/4" nylock).



Battery cables

 Reroute battery cables over smog canister. It may be necessary to cut tape holding positive and negative cables together. DO NOT connect battery cables at this time.

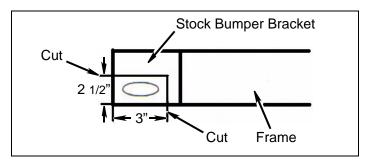
Intake air duct

1. Install intake air duct on top of radiator and throttle body.

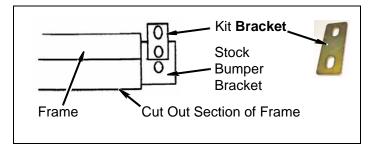
Front bumper

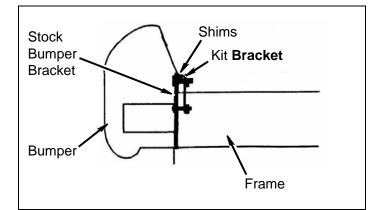
To raise the front bumper, the bottom of the frame must be notched about 2 1/2" up and 3" back. If you do not wish to notch the frame, install the front bumper using the stock hardware.

1. Using a die grinder, notch the bottom of the frame about 2 1/2" up and 3" back as shown.



 Insert a stock bolt through bottom hole in bracket mounted to bumper, then through bottom hole in kit bracket. Install a stock nut onto bolt. DO NOT tighten at this time.





- Insert a kit **bolt** (7/16" x 1 1/2") with a kit **washer** (7/16") through top hole in bracket mounted to bumper, then through kit **bracket**. Use extra kit **washers** (7/16") as shims to adjust angle of front bumper in relation to body. Install a kit **washer** (7/16") and kit **nut** (7/16" nylock) on kit **bolt**. DO NOT tighten at this time.
- 4. Adjust height of bumper according to measurements recorded earlier. Apply Loctite® to kit **bolt** threads. Tighten bumper bolts securely.

After Completing Installation

Airbag fuse

1. Install airbag fuse.

Battery cables

1. Connect both battery cables. Connect positive cable first, then negative cable.

Miscellaneous

- 1. Apply kit **label** (warning) to dashboard in plain sight of all vehicle occupants.
- 2. Check all fasteners to ensure they are tight.

3. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.

If the engine cooling system is hot, the coolant will be HOT and UNDER PRESSURE. To prevent serious personal injury, wait until the cooling system is completely cool before removing the cap from the radiator.

4. If cooling system was opened, start engine and top off cooling system. Purge air from cooling system according to manufacturer's instructions. Install radiator cap.

Dynamic Vehicle Check

 Test-drive vehicle. Check steering in both directions to ensure that there is no bind. Check operation of clutch, brake system, and parking brake. Check operation of transmission and transfer case. Ensure there is full engagement in all gears and 4WD ranges. Check battery connections and electrical component operations.

WARNING

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.

Performance Automotive Group 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. Refer to 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 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 the 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.

Kit Parts List

Qty. Description

<u>Kit 822</u>

- 2 Block, 2" height x 2" diameter
- 12 **Block**, 2" height x 3" diameter
- 2 **Bolt**, 12mm-1.75 x 160mm
- 2 **Bolt**, 7/16" x 5 1/2"
- 2 **Bolt**, 7/16" x 8"
- 2 **Bolt**, 1/2" x 5"
- 2 **Bolt**, 1/2" x 5 1/2"
- 2 Bracket, fan shroud upper (flat, 2", one stud)

<u>Kit 823</u>

- 2 Block, 3" height x 2" diameter
- 12 Block, 3" height x 3" diameter
- 2 **Bolt**, 12mm-1.75 x 180mm
- 2 **Bolt**, 7/16" x 6 1/2"
- 2 Bolt, 7/16" x 9"
- 2 **Bolt**, 1/2" x 7"
- 2 **Bolt**, 1/2" x 7 1/2"
- 2 **Bracket**, fan shroud upper (flat, 3", one stud)

<u>All Kits</u>

- 1 **Bolt**, 1/4" x 1
- 1 **Bolt**, 3/8" x 1 1/4" Allen head
- 2 Bolt, 7/16" x 1 1/2"
- 2 Bolt, 1/2" x 6"
- 2 Bolt, 1/2" x 6 1/2"
- 1 **Bracket**, fan shroud lower ("L"-shaped)
- 2 **Bracket**, front bumper (2" x 5", two holes)
- 1 **Extension**, steering
- 1 Label, logo
- 1 Label, warning to driver
- 1 Loctite, 6ml tube
- 3 **Nut**, 1/4" nylock
- 2 Nut, 7/16" nylock
- 8 **Nut**, 1/2" nylock
- 8 Washer, 1/4" SAE
- 18 **Washer**, 7/16" USS
- 16 Washer, 1/2" USS



Extension, steering

Depending on the vehicle configuration (automatic or manual transmission, 2WD or 4WD, cab length, bed length, etc.), some parts may not be used.

Rev. 2, Copyright 12/04 Performance Automotive Group