

# INSTALLATION INSTRUCTIONS

## 97 FORD EXPEDITION

1. Read the instructions completely and carefully before you begin. Check the kit for proper contents (refer to the part's list and the picture diagrams). Before attempting this installation be sure that you are mechanically capable and that you understand the instructions. If you have any questions or concerns call technical support before you begin.

**WARNING: DO NOT USE AIR IMPACT TOOLS TO REMOVE THE BODY MOUNT BOLTS. THE BODY BUSHING IS EQUIPPED WITH A SLEEVE THAT LOCKS IN PLACE WHEN TIGHTENED. USING AN IMPACT WRENCH WILL STRIP THE BUSHING. THIS WILL RESULT IN DIFFICULTY WITH THE INSTALLATION AND MAY REQUIRE REPLACEMENT OF THE BODY BUSHINGS.**

**NOTES:** To raise the front bumper during the installation of a 3" body lift kit either the tow hooks must be removed or the bumper valance must be notched to clear the tow hooks (if the vehicle is equipped with tow hooks). This should not be necessary with a 2" kit. The rear bumper cannot be lifted with the installation of a 2" body lift kit.

2. Park the vehicle on a clean, dry, flat (level) surface. Block the tires so the vehicle cannot roll in either direction.

3. Disconnect both battery cables. Be sure to disconnect the negative cable first, then the positive cable. Remove the airbag fuse from the fuse box. Consult the owners manual for the exact location of the fuse.

4. Remove the doorjamb scuff plates from the front door area, rear door area, and the rear hatch area by gently pulling until the tabs release from the holes in the floorboard. Remove the front kick panels by gently pulling out from the side until the tabs release. Pull the carpeting back to expose the cab mounting bolt in the front floorboard. Remove the very rear seat from the vehicle. Consult the owners manual for the correct procedure. Remove the bolts that mount the forward rear seats to the floorboard. Remove the seats from the vehicle.

5. **4-wheel drive models with manual shift only.** Remove the four screws that mount the shift boot to the floorboard. Pull the boot up out of the way (It cannot be removed over the shift knob). Remove the four bolts that mount the inner shift boot to the floorboard (there are two on top and two on the side). Carefully pull the inner boot up through the hole in the carpeting and out of the way. Remove the bolt that mounts the shift lever to the transfer case shift linkage. Remove the shift lever from the linkage. Slide both shift boots off the bottom of the shift lever. Lubricating the shift lever to remove the inner boot may be necessary. **Electronic shift models only:** If the vehicle is equipped with electronic shift control, it should require no modifications. Be sure that the wires to the transfer case are long enough before lifting.

6. Loosen and remove the bolt that mounts the steering shaft universal joint to the steering column under the dash. Remove the steering shaft from the column. Install the female side of the steering extension to the male shaft at the steering column. It should only go on one way. Install the Allen head bolt in the steering extension. Be sure that the bolt goes through the retaining groove on the male shaft. Tighten the Allen head bolt securely. *We recommend the use of loctite or a similar adhesive on all steering hardware.* Do not install the steering shaft to the extension at this time. It will be installed after the lifting operation is complete. Lock the steering column so the steering wheel cannot turn independently from the steering shaft. If the steering shaft was to move from its current location, it could cause the airbag system to malfunction.

7. Remove the cover over the throttle body on the intake manifold. Loosen the clamp that attaches the air duct to the throttle body. Release the clamp that holds the two halves of the air filter housing together. Remove the air duct from the throttle body. Lay the air duct back out of the way.

8. Remove the two bolts that mount the fan shroud to the radiator. Pull the fan shroud up out of the clips on the radiator. Lay the fan shroud over the fan away from the radiator.

9. Pull down the air flap between the bumper and the bottom of the core support to reach the front bumper mounts. Be careful not to damage the plastic mounting tabs. Disconnect any wires going to the front bumper (driving lights, etc.). Remove the four nuts that mount the front bumper to the frame mounts. Remove the front bumper from the vehicle.

10. Remove the bolts that mount the transmission cooler and the power steering collar to the front of the core support. They will be reattached after the lifting operation is complete.

11. Remove the bolt that attaches the body to frame ground wire to the frame under the passenger side door. The ground wire will be moved after the lifting operation is complete.

12. Remove the plastic clip that attaches the wires and front axle vent hose from the front passenger side frame rail.

13. Remove the wire loom that goes to the battery from the bracket on top of the passenger side frame rail. Remove the bolt that mounts the bracket to the frame rail. It needs to be moved and modified.
14. A steel line runs along the drivers side frame rail from the engine to the rear of the vehicle. Remove the line from the front two mounting brackets. This should allow the line to flex while lifting.
15. **Automatic transmission models only.** The shifter is cable operated. Remove the tab that mounts the cable to the floorboard under the dash. This will allow the cable to slide through the floorboard while lifting.
16. Remove the fuel cap. Remove the three screws that mount the fuel filler to the body. The hose will need to be adjusted after the lifting operation is complete.
17. Disconnect the license plate lights from the rear bumper. Remove the four nuts that mount the rear bumper to the frame. Remove the rear bumper from the vehicle.
18. Check the brake lines between the ABS module (drivers side frame rail) and the master cylinder. The lines must be bent before the body can be lifted. Gain as much slack in the lines as possible.
19. Loosen but do not remove all body mounting bolts. They are located as follows: beside the radiator screwing up from the bottom, in the front floorboard, behind the front seat, over the rear axle and at the rear of the vehicle.
20. Remove the body mounting bolts from the passenger side of the vehicle only. Check for any wires, hoses, cables, etc. that may be too short and that may have not been covered in the instructions. Using a hydraulic jack and a wooden block, Slowly lift the body just high enough to place the spacers on the mounting pads. Be sure to continuously to check for any wires, cables, hoses, etc. that may be binding. Pay very close attention to the brake lines. Carefully check all heater hoses, oil lines, and other lines in the gearbox area. There are many hoses that run in different directions. It is vital that none of the hoses are kinked or rubbing after the body has been lifted. Remove the front body bushing from the frame mount. Using a 1/2" drill, drill the threads out of the bushing sleeve. This will allow the new bolt to slide through the sleeve. Replace the bushing on the frame mount. Place the spacers on the body bushings. Install the new mounting bolts with a 1/2" washer in the following manner: 12mm x 180mm at the front mount, and 12mm x 140mm on the other mounts (the bolt lengths for the 2" kit are 20mm shorter).
21. Repeat step 20 for the driver's side of the vehicle. Tighten all body mounting bolts securely. *We recommend the use of loctite or similar adhesive on mounting hardware.*
22. Check the parking brake cable to be sure that it has slid down through the rubber grommet at the floorboard. If it has not, slide the cable down through the grommet. Be sure that the grommet is attached securely to the floorboard. Check the automatic transmission cable to be that it has slid down properly.
23. Connect the steering shaft to the steering extension. It should only go on one way. Be sure that the steering shaft and the steering wheel have not turned from their original location. Install the stock steering bolt in the steering shaft. Be sure that the bolt engages the slot on the steering extension. *We recommend the use of loctite or similar adhesive on all steering hardware.*
24. **4-wheel drive manual shift only.** Scribe a line along the 4 wheel drive shift lever just above the bend. Cut the shift lever into two pieces through the scribed line. Insert the shift extension pin between the two pieces of the shift lever. Align both parts of the scribed line. Weld the extension in place. *We recommend that all welding be done by a certified welder only.* Painting the shift lever to help prevent rusting may be desirable. Reinstall both shift boots onto the shift lever. Reinstall the shift lever to the transfer case shift linkage. Check the shift lever operation. Be sure that it engages properly in all 4-wheel drive ranges. Install the mounting bolt and tighten it securely. Mount the inner shift boot to the floorboard. Tighten the mounting screws securely. Mount the outer shift boot to the inner housing. Tighten the mounting screws securely. Check the shift lever operation again.
25. Replace the carpeting to its original location. Reinstall both kick panels and all doorjamb scuff plates. Replace the rear seats at this time. Mount the forward rear seat to the floorboard using the stock hardware. Tighten all mounting hardware securely. Replace the very back seat to the stock location at this time.
26. Using the stock bolt, mount the "L" shaped ground wire relocating bracket to the passenger side frame rail where the ground wire was originally mounted. The bracket should be positioned where the long side of the bracket is against the frame rail. Tighten the bolt securely. Mount the ground wire to the bracket using a 1/4" x 1" bolt, 2 1/4" washers and a 1/4" nylock nut, mount the ground wire to the bracket. Tighten the bolt securely.
27. Using the stock bolt, mount the remaining "L" shaped bracket to the top of the passenger side frame rail where the battery cable bracket was mounted. Mount the bracket so the long side is pointing upward. Tighten the mounting bolt

securely. Bend the stock battery cable bracket 90 degrees. Mount the stock bracket to the new bracket using a 1/4" x 1" bolt, 2 1/4" washers and a 1/4" nylock nut. Be sure that the ground wire is reconnected when the "L" bracket is mounted. Tighten the 1/4" hardware securely.

28. The lower mounting tabs on the fan shroud must be removed to lower the fan shroud. On some models it may be necessary to remove the radiator and the fan shroud to access the lower mounting tabs. If the radiator needs to be removed, proceed as follows: Be sure that the radiator has cooled sufficiently to prevent any injury. Remove the radiator cap. Drain the coolant into a clean container. Remove the upper and lower radiator hoses from the radiator. If the vehicle is equipped with an automatic transmission, remove the transmission cooling lines from the radiator. Remove the upper radiator mounting bolts. Remove the radiator from the vehicle. Remove the fan shroud from the vehicle. Using a hacksaw, cut the both lower fan shroud mounting tabs off flush with the side of the shroud. Reinstall the fan shroud in the vehicle. Reinstall the radiator in the vehicle. Reconnect the transmission cooling lines. Reconnect both radiator hoses. Reinstall the top mounting bolts and cover. Be sure that all hose clamps and lines are tightened properly and that the drain is completely closed. Refill the radiator as much as possible. It will need to be topped when the vehicle is started. Using the stock bolts mount the two upper fan shroud lowering brackets to the radiator where the fan shroud was originally mounted. Do not tighten. Mount the fan shroud to the studs protruding from the fan shroud brackets. Install a 1/4" washer and nylock nut on each stud. Do not tighten. Check the fan to fan shroud clearance. Be sure that the gap is the same all the way around. Tighten all upper fan shroud mounting hardware securely. Remove the bolt in the front of the core support that mounts the center brace to the lower part of the core support. Mount the lower fan shroud support bracket to the location that the bolt was just removed. Using the bracket as a template, mark the bottom of the fan shroud through the hole in the bracket. Drill a 5/16" hole in the bottom of the shroud. Using a 1/4" bolt, 2 1/4" washers and a 1/4" nylock nut, mount the fan shroud to the lower fan shroud support bracket. Be sure to install the bolt from inside the shroud so the threads on the bolt are pointing downward. This will prevent the fan from making contact with the bolt. Tighten the bolt securely. Check the fan to fan shroud clearance again. Be sure that it has not changed. Reinstall the air intake duct to the top of the throttle body. Reconnect the duct to the air filter housing. Close the clamp at the air filter housing. Tighten the clamp at the throttle body. Reinstall the cover over the throttle body. Tighten the mounting bolts securely.

29. Remount the transmission cooler and the power steering cooler to the core support. Carefully rebend the lines and reroute them under the fan shroud. Be sure that the lines are not rubbing anywhere.

30. Locate the hose that is rubbing on the gearbox. Using the 3/4" x 6" hose provided cut the hose (lengthwise) and wrap it around the other hose that is rubbing on the gearbox. Attach the hose using the tie straps (zip ties) provided.

31. Adjust the fuel filler hose. Slide the filler hose up slightly from the tank and down slightly from the neck until the neck can connect to the body. Be sure that there is ample engagement of the hose at both ends. Mount the filler neck to the body using the stock screws. Tighten all fuel filler hardware securely. Reinstall the fuel filler cap.

32. Install the front bumper. **Note:** It may be necessary to trim the bottom outside corners of the frame horns if they make contact with the bumper valance. If the vehicle is equipped with tow hooks, one of two things must be done. Either the tow hooks must be removed, or the bumper valance must be notched for clearance around the tow hooks. Using a 7/16" x 1 1/2" bolt, 2 7/16" washers and a 7/16 nylock nut at the bottom stock mount, install the front bumper relocating brackets behind the stock bumper mounts. Do not tighten. Install the bottom stud on the bumper to the top hole on the stock mount. Install the top stud to the top hole on the new bracket. Install the stock nuts. Adjust the bumper to body clearance. Tighten all bumper mounting hardware securely. Reconnect any wires that were previously disconnected from the front bumper. Replace the rubber air flap to its original location. *We recommend the use of loctite or similar adhesive on all mounting hardware.*

33. Install the rear bumper using a 7/16" x 1 1/2" bolt, 2 7/16" washers and a 7/16 nylock nut at the bottom stock mount, install the front bumper relocating brackets behind the stock bumper mounts. Do not tighten. Install the bottom stud on the bumper to the top hole on the stock mount. Install the top stud to the top hole on the new bracket. Install the stock nuts. Adjust the bumper to body clearance. Tighten all rear bumper mounting hardware securely. Reconnect the license plate lights to the rear bumper. *We recommend the use of loctite or similar adhesive on all mounting hardware.*

**WARNING: DO NOT ATTEMPT TO TOW WITH THIS BUMPER AFTER THE BUMPER BRACKETS HAVE BEEN INSTALLED. THE BRACKETS SUPPLIED IN THIS KIT ARE NOT RATED FOR TOWING OF ANY KIND. ANY ATTEMPT TO TOW WITH THIS BUMPER CAN RESULT IN VEHICLE DAMAGE AND PERSONAL INJURY. ALL TOWING SHOULD ONLY BE DONE WITH A CLASS III RECEIVER**

## **TYPE HITCH.**

34. Locate the spare tire crank mechanism. Cut a ½" hole in the plastic valance that lines up with the crank mechanism. Check the operation of the spare tire crank.

35. Place the warning sticker on the vehicle dash in plain sight of all vehicle occupants.

36. Double check the vehicle. Reinstall the air bag fuse. Reconnect both battery cables. Be sure to connect the positive cable first, then the negative cable. Check all wires, hoses, cables, etc. to be sure that there is ample slack. Double check the brake lines between the master cylinder and the ABS module. Be sure that there is ample slack. Double check the fan to fan shroud clearance. Be sure that the fan cannot make contact with the shroud. Check the radiator hoses to be sure that they are not contacting any moving parts (such as the fan or lower pulley assembly). Check all other hoses between the engine and core support area. Be sure that they are not rubbing or binding in any way. Check all hardware to be sure that it has been tightened properly. Check the entire engine compartment for anything that looks unusual. If the radiator was removed earlier, remove the radiator cap so the radiator can be refilled once the vehicle has reached normal operating temperature. Start the vehicle. Check the steering. Turn the wheel all the way to the left and all the way to the right. Be sure that there is no binding. Check the clutch operation. Check the manual transmission shift lever operation. Be sure that it engages in all gears. Check the automatic transmission shift lever operation. Check the 4-wheel drive shift lever operation. Once the engine has reached normal operating temperature, top off the coolant level and install the radiator cap. Be sure that the overflow tank is filled to the proper level. Check the transmission fluid level. Be sure that the fluid is filled to the proper level. Test drive the vehicle in all gears and 4-wheel drive ranges. Check all mounting hardware in 500 miles and as part of your regular maintenance schedule.

## PARTS LIST

Parts for the 2" kit are the same as the 3" kit unless other wise noted.

10	3" large spacers	2" large spacers
8	12mm x 140mm bolts	12mm x 120mm bolts
2	12mm x 180mm bolts	12mm x 160mm bolts
10	1/2" x 3/16" thick washers	
1	steering extension	
1	3/8" x 1 1/4" allen head steering extension bolt	
2	fan shroud drop down brackets	
1	lower fan shroud support	
4	bumper straps	
4	7/16" x 1 1/2" bolts	
8	7/16" uss washers	
4	7/16" nylock nuts	
2	ground wire extensions (L shaped)	
3	1/4" x 1" bolts	
8	1/4" washers	
5	1/4" nylock nuts	
1	1/2" round transfer case shift extension pin	
1	6" piece of 3/4 hose	
2	zip ties	