



2265 Crosswind Drive • Prescott, AZ 86301
(928) 636-3175

**222003SSV
FORD 2WD EXPEDITION
V8 ONLY (1997-2000)
3" SUSPENSION LIFT
(With SSV Shock Absorbers)**

INSTALLATION INSTRUCTIONS

⚠ WARNING
Read and understand all instructions, warnings and safety precautions in these instructions and your owners manual before attempting to install these components.

⚠ WARNING
Performance Automotive Group strongly discourages the use of a suspension lift kit or any other lift device in addition to a body lift kit. A vehicle that uses a combination of lift devices not engineered together may result in unexpected and unsafe handling characteristics, which could result in serious injury or death.

PRODUCT SAFETY WARNING
Certain Performance Automotive Group 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. Use of oversized tires, suspension lifts, body lifts and other suspension modifications may raise your vehicle's center of gravity resulting in an increased tendency for the vehicle to pitch and roll during sudden turns or abrupt maneuvers. Extreme care must be used to prevent loss of control or vehicle roll over. Failure to drive your modified vehicle safely may result in serious injury or death. Drive at reduced speeds to ensure your ability to maintain control of the vehicle under all driving conditions. Always wear seat belts.

⚠ WARNING
Many states have laws restricting bumper heights and vehicle lifts. Local laws should be consulted to determine if the changes you intend to make to your vehicle comply with state laws.

⚠ WARNING
The use of larger than OE tire and wheel combinations may reduce the effectiveness of the braking system (including ABS equipped) and increase the amount of pedal pressure necessary to obtain a given braking distance with normal stops and increase the stopping distance in a panic stop. Drive at reduced speeds and allow for extra stopping distance when driving a modified vehicle. Discuss this issue with your tire and wheel dealer before installing larger tires and do not use tire and/or wheel combinations that compromise safe braking performance.

⚠ WARNING
Supplied in this kit is a safety WARNING label. Install this label inside the cab of the vehicle where it will be highly visible to all operators of the vehicle.

⚠ CAUTION
Proper installation of Performance Automotive Group products requires knowledge of recommended procedures for disassembly/assembly of OE vehicles and components. Access to OE shop manuals and special tools are required. Attempting to install this kit without knowledge of these procedures may affect the safety of your vehicle and/or the performance of these components. Performance Automotive Group strongly recommends that this kit be installed by a certified mechanic with off-road experience.

⚠ WARNING
This lift kit should only be installed on vehicles in good working condition. Before installation, the vehicle should be thoroughly inspected for evidence of corrosion or deformation. This lift kit should not be installed on any vehicle that is suspected to have been in a collision or misused. Off road use of your vehicle may increase the stresses applied to the OE mounts. It is not recommended that a vehicle be used in extreme off road maneuvers such as jumping. Failure to observe this warning may result in serious personal injury, death and/or severe damage to your vehicle.

PRE-INSTALLATION NOTES

1. Use the appropriate tool for the job and be sure that tools are in good condition. Failure to use proper tools and/or tools in good condition may result in personal injury.
2. **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)636-3175.
3. Compare parts included in your system with the enclosed parts list. Placing hardware with components before you start may reduce installation time. Contact your Trail Master dealer if any parts are missing or appear to be different than those indicated on the parts list.

⚠ CAUTION

Performance Automotive Group recommends the use of Loctite® on all hardware, unless noted otherwise

⚠ WARNING

Always wear safety glasses when using power tools.

⚠ WARNING

Properly block and secure vehicle prior to installation.

FRONT INSTALLATION INSTRUCTIONS

1. If not working with shop hoist park vehicle on smooth, level surface. Use floor jack to raise front of vehicle until wheels are several inches off ground. Support vehicle with heavy duty jack stands under frame rails behind front lower control arms.

⚠ CAUTION

Inspect OE Ball Joints & Rod Ends for wear. Replace any components showing excessive wear.

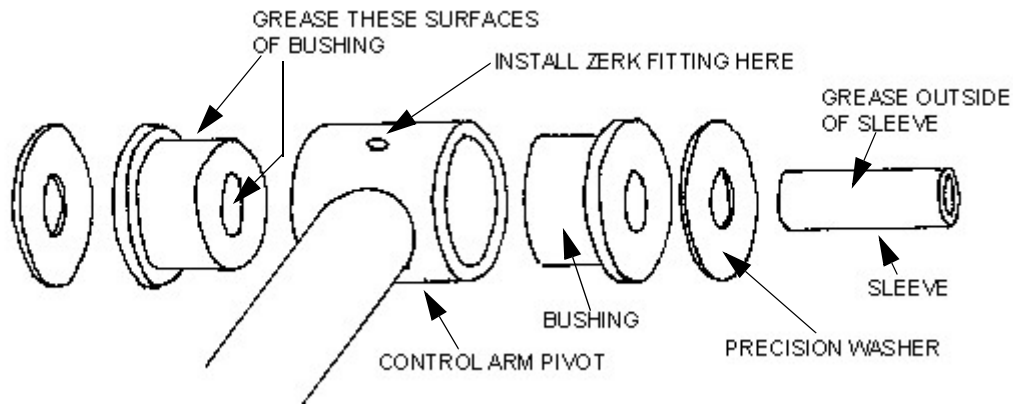
2. Remove front wheels and shock absorbers. Remove front sway bar end links. Remove front brake calipers from spindles and tie them out of the way, *do not let them hang by the brake line.* Remove the cotter pin from the upper ball joint. Dis-

connect the ABS sensor wires if equipped. Note routing of brake & ABS lines for re-assembly.

⚠ CAUTION

Coil Springs store energy. Always release the load on coil springs in a slow and controlled manner. Use a safety chain or cable to prevent the possibility of the spring coming loose and causing injury. We recommend using a high quality internal type coil spring compressor when removing and installing springs.

3. Using a coil spring compressor, compress the spring until tension on upper and lower pockets is minimal.
4. Loosen upper ball joint nut. Use ball joint separating tool to free upper ball joint from the spindle. Use care to not damage dust boot.
5. Support the lower control arm with floor jack and loosen the lower ball joint nut. Use ball joint separator tool to free lower ball joint from spindle.
6. Remove the upper & lower ball joint nuts and remove front spindle assembly from control arms. Slowly lower the floor jack until the coil spring can be removed from vehicle. Carefully release the spring compressor. Be sure to retain the rubber insulator ring from the top of the coil spring. Repeat this step on opposite side of vehicle.
7. Remove upper control arms from vehicle by removing pivot bolts. Assemble the Trail Master upper control arms as follows:
 - a. Install the bushings, sleeves and precision washers into the pivots as shown. *Be sure to grease the components only where indicated* using a high quality teflon based or molybdenum disulfide grease. The bushings and sleeves may be driven in with a plastic faced hammer or pressed in with a bench vise.
 - b. Install the supplied grease fittings into the holes in the control arm pivots. These fittings are self threading and must be installed as straight as possible into the holes. You may pre-tap the holes using a 1/4-28 tap to ease installation if desired. Note that the fittings do not necessarily need to thread all the way down into the holes. As long as the fittings are tight, they will operate correctly.



8. Install the new ball joints into the control arms using the 8mm hardware supplied. Mount the ball joints into the control arms using the 8mm hardware supplied. Mount the ball joints to the top surface of the upper control arms. Tighten the hardware to 17 ft. lbs.
9. Install the upper control arms into the vehicle, making sure that the arms are installed on the proper side of the vehicle as labeled. Use the D-bolts and eccentric washers supplied. If unsure, please note that the longer control arm tube should face the front of the vehicle on both sides.
10. Tape the rubber insulating rings to the top of each new coil spring. Install the coil spring compressor into one of the new coil springs at this time and compress the spring about one inch to ease installation. Position the floor jack underneath the lower control arm and install the coil spring into the lower control arm. Be sure that the end of the coil spring is correctly seated in the pocket in the lower control arm.
11. Raise the lower control arm enough to attach the upper ball joint and thread the new ball joint nut onto the stud. Carefully remove the floor jack and remove the spring compressor. Tighten the ball joint nut to factory specifications and replace the cotter pin. Repeat coil installation on the other side of the vehicle.
12. Route and secure the brake calipers, brake lines, and ABS sensor wires in a similar fashion as noted during disassembly. Use supplied tie wraps if needed.
13. Replace sway bar end links.
14. Install the new SSV shock absorbers.

15. Replace wheels. In ALL steering positions, check to ensure that there is adequate clearance between ALL rotating, moving, fixed and heated members. Check brake/ABS line routing.
16. Lower the vehicle to the ground. In ALL steering positions, check to ensure that there is adequate clearance between ALL rotating, moving, fixed and heated members. Check brake/ABS line routing.

REAR OF VEHICLE

1. If working without a shop hoist block the front tires and raise the rear of the vehicle and securely support the frame rails with heavy duty jack stands so that the rear tires are several inches off the ground. Remove both rear wheels.
2. Using a floor jack, carefully raise the rear axle housing slightly (one inch max) to relieve pressure from the rear fasteners. Remove the lower shock bolts, lower stabilizer bar end link attachments, and lower rear track bar fasteners. Carefully lower the rear end assembly just enough to remove the rear springs. Lower just enough further to install the new springs. *Make sure to not let the rear axle hang by the rear brake line. Temporarily remove the rear brake line if necessary.*
3. Install rear springs, raise rear axle just enough to re-install all fasteners removed earlier. Reinstall the lower shock bolts, lower stabilizer bar end link attachments, and lower rear track-bar fasteners.
4. Install rear wheels and lower vehicle onto ground. Tighten and torque all fasteners previously removed.

5. Check vehicle for issues noted in post installation notes.
6. Before driving the vehicle, be sure to test the brakes for the same pedal feel before this installation. If the pedal feels softer or not as high from the floor, inspect the braking system and correct any problems before moving the vehicle. Drive the vehicle slowly at first to assure that the brakes are functioning properly.
7. Immediately after installation have the vehicle aligned by a certified mechanic. The alignment should be within OE specifications. The tire and wheel size must be considered when different from OE. Proper alignment is critical for safety and maximum tire wear.

POST-INSTALLATION NOTES

⚠ CAUTION

1. Retorque all fasteners after 500 miles and every off-road use. Visually inspect components and retorque fasteners during routine vehicle service.
2. Visually inspect components for wear or damage after each off-road use and during routine vehicle servicing. Worn, damaged or loose parts can fail suddenly resulting in loss of control of the vehicle and personal injury.
3. Headlight adjustment will need to be done after installation of this suspension lift.

1. Trail Master's goal is to provide you with the best system possible for a reasonable cost. It must be noted that the components in your Trail Master system do not eliminate OE component weaknesses.
2. Retain this and all information regarding your altered vehicle for future reference. Thank you for choosing Trail Master Suspension. For questions or suggestions, contact our Technical Assistance Department at (928) 636-3175.

PARTS LIST

QtyDescription

Box 1 of 2

- | | |
|---|---------------------------|
| 2 | Front Coil Spring (3") |
| 8 | 9/16" Flat washer |
| 8 | 9/16" High Nut |
| 4 | 14mm D-Bolt Assembly |
| 4 | Eccentric Washer |
| 8 | 14mm Flat Washer |
| 4 | 14mm Lock Washer |
| 4 | 14mm Hex Nut |
| 2 | Spacer (1-1/4"OD x .40thk |
| 4 | Sleeve (3/4"OD x 2.62"L) |
| 8 | 2"OD Flat Washer |
| 1 | Upper Control Arm (DRVR) |
| 1 | Upper Control Arm (PASS) |
| 2 | Ball Joint |
| 8 | Bushing |
| 4 | Zerk Fitting |
| 4 | Tie Wrap 8" |
| 8 | Bolt, 8mm x 25mm |
| 8 | Bolt, 8mm x 35mm |
| 8 | Steel Locknut 8mm |
| 8 | Lock Washer 8mm |
| 2 | Cotter Pin |
| 2 | Castle Nut 14mm |

Box 2 of 2

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|---|---------------------------|
| 2 | Front Shock Kit (75560-W) |
| 2 | Rear Shock Kit (72710-W) |
| 2 | Rear Coil Spring (237) |

TORQUE SPECIFICATIONS

- | | |
|-----------------|-----------------|
| 14mm Fasteners | 83-112 ft. lbs. |
| 9/16" Fasteners | 114 ft. lbs. |
| 8mm Fasteners | 17 ft. lbs. |

DS72-A
2/7/05