

# *kelderman air ride*

*"The difference in the ride is like night and day"*

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## 2004 & Older Ford Front System

Kelderman Air Ride systems are developed for 2004 & older Fords. This system was developed to improve the ride of the 3/4 & one-ton Ford pickups. There are several advantages to equipping your truck with air ride suspension:

- Improves the ride of the truck
- Bolts into existing holes on truck frame
- Increases load carrying capacity
- East to install, maintenance free



2004 & older Ford Front



## Warranty Disclaimer Notice Read Before Beginning Installation

Some Kelderman Air Ride kits contain both fine thread and course thread fasteners, fittings and air bag mountings. Before attempting to tighten

any threaded portion of the Air Ride, check to be sure the threads are the same size and thread count before attempting to tighten. Damaged or cross-

threaded fasteners, fittings and air bags caused by improper size. Thread count or misalignment are not covered by warranty.

## 2004 & Older Ford

### Tools Required for Installation of the Air Ride Unit

Before installation of the Air Ride unit, prepare a smooth, flat, hard surface and have all tools and equipment needed for the job. Chock the rear wheels of the truck, to prevent it from rolling forward or rearward.

Place a jack on each side of frame behind the front wheels, in the vicinity of the front seat. (1.1)

#### Tools and equipment required:

**Cutting Torch**

**(2) Jacks**

**(2) Jack Stands**

**Wheel Chocks**

**Combination Wrench Set**

**Socket Set**

**Wedge or Pry bar**  
(porta-power with jaws / spreader)

**Large "Zip" Ties**

**Brake Line Bending Tool**



1.1



**DANGER**

**\*\*When raising or lowering the truck, keep jack stands in place to prevent the truck from falling, which could cause severe personal injury or death\*\***

### Installing the Air Ride

**Step 1.** Measure the height of the front of the truck while setting on a level surface. Record this measurement here: \_\_\_\_\_"

**Step 2.** Lift up the truck by placing a jack under the frame on the side of the truck which will be installed first. Place jack stand next to the jack for safety. Remove the front tire.

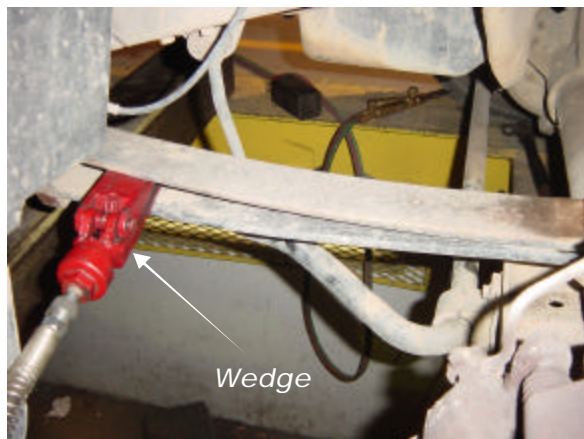
**Step 3.** Place a jack under the axle of the side of the truck that will be installed first. When on the driver's side, place a jack under the cast iron piece that the "U" bolts go through. This will keep the axle in the proper location.

**Step 4.** Remove the factory shock, shock mounts and "U" bolts.

**Step 5.** Lower the jack under the axle to remove some of the spring tension. Take a wedge or pry bar and drive between the 2 springs. (1.2) Measure from the center of the spring forward 8 inches. Use a torch to cut the front half of the bottom leaf. Use a piece of flat metal to slide in between the springs to prevent cutting into the top leaf. (1.2)

## Installation Instructions (continued)

**Step 6.** After the front piece of the leaf is cut, measure back 10" from the center of the spring. Mark the spot. Drive in a wedge, slide in the protective plate and cut the leaf. (1.3)



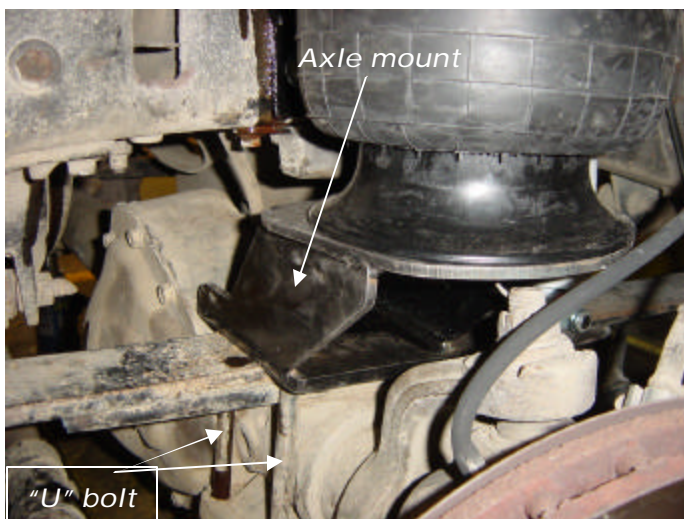
1.2



1.3

**Step 7.** Locate the bottom air bag axle mount and bolt it to the axle using the factory "U" bolts. The shock mount faces towards the rear of the truck. (1.4 & 1.5)

Recommended torque ratings on bolts:  
3/8" grade 8 fine thread - ft. lbs  
factory bolts - 45 ft. lbs.  
"U" bolts - 100 ft. lbs.



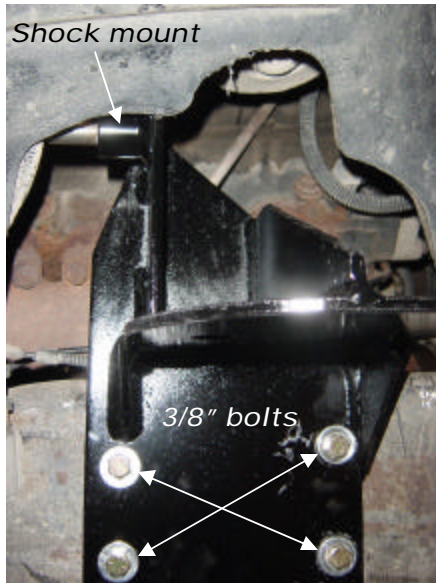
1.4



1.5

## Installation Instructions (continued)

**Step 8.** The top air ride mount is bolted in place with the (4) 3/8" grade 8 bolts and lock nuts provided in the kit (put a flat washer on each side). (1.6 & 1.7)

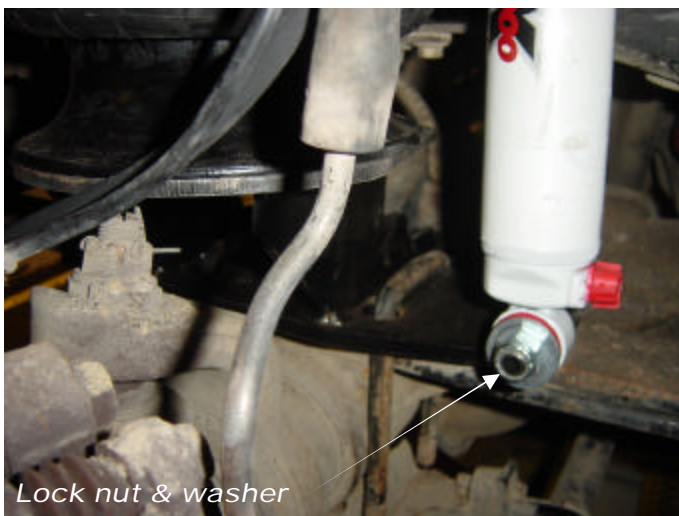


1.6



1.7

**\*\*NOTE:** For convenience, mount the Rancho shock on the upper mount before putting in place. Go ahead and tighten the shock. The shocks can be mounted later, but it is difficult to tighten the upper shock nut. The shocks are held on with a flat washer and lock nut. (1.8 & 1.9)



1.8



1.9

## 2004 & Older Ford

Step 9. Mount the air bag in between the top and bottom mount. Tighten the nuts on top of the bag and the bolt that goes into the bottom of the bag. (2.0)

Step 10. Fasten the brass air line fitting in place. Route the air line into the engine compartment and put the Schrader valve on the end. You may want to "zip" tie the hose in a convenient location. Make sure the air line is away from any hot exhaust or moving engine parts.



2.0



Step 11. The factory brake lines need to be bent up and back to clear the air bag when turning. Use extreme caution when doing this. We recommend a brake tube bending pliers. This will allow you to bend the brake line without kinking it. If the line kinks, replace it with a new line. (2.1)

2.1

## Installation Instructions (continued)

**Step 12.** Once you have bent the line, turn the steering wheel without the tire on it to check for clearance. Once you have clearance, put the tire on and make sure the brake lines will not rub on the tire.

**Step 13.** Use large zip ties to fasten the anti-lock wires to the brake line.

**\*\*NOTE:** It is very important that the brake lines and the anti-lock brake wires do not rub on the air bag or tire. Failure to check for this could cause serious personal injury or death.

**Step 14.** Repeat all steps on opposite side of truck.

**Step 15.** Add air to the air bags. Refer to the measurement recorded in Step 1 to obtain correct ride height. Record the pressure on each side and use as future reference.

**Step 16.** If your kit has adjustable shocks, set them on the middle setting and take a test drive. Depending on the loads and terrain driven, adjust the shock accordingly. The higher the number, the stiffer the setting. **(2.2)**



Shock Adjustment Knob

There is no magic number for air pressure requirements. All you have to do is go by the truck ride height. Apply air to the system until the vehicle is at the stock ride height. Do not be surprised if the pressure is different between sides. If the kit you purchased has adjustable shocks, start at the middle setting and adjust the settings until you discover the best ride for you and your truck.

## Contact Information

*Kelderman Air Ride appreciates your business. We strive to meet the needs of our customers by providing the highest quality products. If you have any questions concerning this system, please call or email us at the following:*

*2686 Highway 92  
Oskaloosa, Iowa 52577*

*Phone: 800 334-6150*

*Fax: (641) 673-4168*

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*[www.keldermanairride.com](http://www.keldermanairride.com)*



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## Parts Checklist

<u>Quantity</u>	<u>Description</u>
2	1/2" Nuts / Lock Washers / Flat Washers
2	3/4" Jam Nuts and Lock Washers
2	5323 Air Bags
2	Axle-Mounted Bracket
2	Air Bag Top Plate
8	3/8" Grade 8 Bolts / Lock Nuts / Flat Washers
4	1/2" Course Thread Lock Nuts
2	Rancho 9000s
1	Bumper Sticker
1	Installation Instructions
1	Owner's Manual