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# Part # 11009502 **Universal Air Spring Installation Kit** (w/ F9000's)

2	90009000	F9000 airsprings
2	90000027	Pattern plate with 7/16 nut centered
2	90002232	Uncoated pattern plates
1	90001791	23" stick of 4.5" tubing
Hard	ware:	3/8 x 3/4 uss bolt 3/8 flat washers
6 6 2 2 2	99371001 99373003 99373005 99435002 99433002 99432001	3/8 x 3/4 uss bolt 3/8 flat washers 3/8 lock washer 7/16 x 8 inch studs 7/16 flat washers 7/16 nyloc nuts

## Hardware:

6	99371001	3/8 x 3/4 uss bolt
6	99373003	3/8 flat washers
6	99373005	3/8 lock washer
2	99435002	7/16 x 8 inch studs
2	99433002	7/16 flat washers
2	99432001	7/16 nyloc nuts

#### INSTALLATION INSTRUCTIONS

### FRONT SYSTEM

- 1.Determine ride height of vehicle. On an existing vehicle, remove your present springs and use a floor jack to adjust vehicle height. Be sure to maintain a reasonable ground clearance,. Remember that you will have 3 to 4 inches of downward adjustment from this point. On most vehicles, the lower A arms should be approximately level at ride height. [Ride height refers to the level at which the vehicle will travel down the road, airsprings inflated.] Record the spindle measurement and the fender lip measurement so this relationship can be re-created at a comfortable working height.
- 2. Attach the air spring to the lower bracket and attach the assembly to the lower A arm. Make sure the air spring does not contact any part of the car at any time!

# THE AIR SPRING BELLOWS MUST NOT CONTACT ANYTHING AT ANYTIME!!!

Set the airspring as far toward the wheel as possible while avoiding steering linkage, brake calipers sway bars brake lines, etc.

- 3. With the spindle at ride height, attach the upper bracket to the airspring. Make sure the airspring is also at ride height. You may have to compress the airspring slightly to the correct installed height dimension included with your system. If you are unsure about this dimension, call us and we can give it to you.
- 4. With the airspring and bracket assembly in place, you can now determine the location of the upper bracket. Clamp the bracket in place for marking holes or for welding. Double check the clearance around the airspring in all wheel positions and all steering angles. You will also want to check for proper ground clearance [at least 2 "] when the airspring is completely deflated. Remember that a bump stop should be used to maintain proper ground clearance when the airspring is completely deflated.
- 5. Remove the airspring to do the final welding. The airspring has NO tolerance for weld splatter!
- 6. Shock absorber mounting is next. The bottom of the shock is mounted to the lower A arm. The top of the shock is mounted to the frame. With the A arm at full droop,[max airspring height dimension] trial fit the shock to avoid interference with steering and brake components. Make sure that the shock doesn't bottom out before the airspring is completely deflated.[vehicle on bumpstops. Refer to min. height dimension.]

#### REAR SYSTEM

- 1. Set rear of vehicle at ride height. You may have to remove the coilsprings or some of the leafs to let the vehicle settle to the desired ride height. Remember that this is the height that you want the car to go down the road at. You will have approx. 4" of drop available from this point.[Note: You must leave at least 2 leafs in the leafspring pack for lateral stability. If the vehicle is not low enough at that point, a 4 link or ladder bar suspension should be considered.]
  Continued....
- 2. Record measurement of axle and fender lip so this relationship can be recreated at a comfortable working height.
- 3. When the vehicle is safely supported by the frame at working height, install the lower airspring bracket onto the axle tube level with the car.[not necessarily level with the ground.] Be aware of any interference from exhaust, brake lines, suspension components, etc. Refer to the dimension chart for the inflated diameter of the airspring. It may be substantially larger than the uninflated diameter.

## REMEMBER: THE AIRSPRING MUST NOT TOUCH ANYTHING AT ANYTIME!!

4.Install the airspring onto the lower bracket and use it to determine the location of the upper bracket. A good alternative to this is to use a length of thread stock with some nuts and washers to simulate the airspring at ride height. This insures proper alignment of the upper and lower brackets and will hold the upper bracket steady while it is being attached to the vehicle.

- 5. Attach the upper bracket to the vehicle with bolts or by welding. remember that the airspring has no tolerance to weld splatter!
- 6. The shock mounting for the rear may have to be modified. Make sure the minimum and maximum height dimensions for the airspring are not exceeded. Bumpstops must be installed to restrict the maximum compression and extension of the rearend. Usually a rubber snubber works well for compression and the shock absorber mounting restricts the extension.

## COMPRESSOR MOUNTING AND AIRLINE ROUTING

- 1. The air compressor and reservoir may be mounted in any convenient location. A 12v power wire of 12ga or larger with a 20amp inline fuse will be required. This power wire should be run directly to the battery. The fuse should be placed as close to the battery as possible. A 120psi pressure switch is supplied to activate the compressor according to pressure requirements. The RED wire from the compressor and the 12v positive wire from the battery are connected to the terminals of this switch [either terminal]. Vibration mounts are supplied with the compressor to aid in noise reduction.
- 2. The airline fittings supplied are the push-to-connect style. The plastic airline must be cut clean and square to seal properly. A safety razor works well. A diagonal cutters does not.
- 3. The airlines should be kept away from exhaust, moving components and sharp edges.
- 4. The control panel[s] should be mounted in a convenient location to the driver. The wires extending from the controller are for gauge illumination. One wire will be connected to a suitable power source,[one that is hot when your lights are on] and the other will be connected to ground.

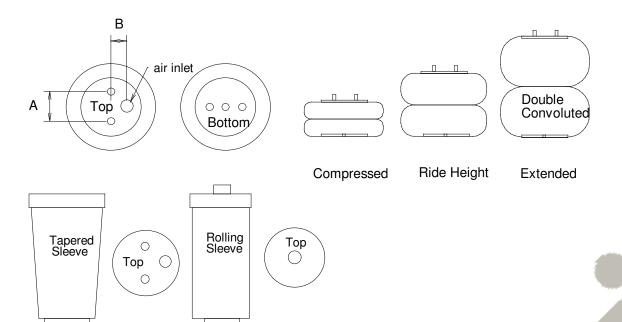
After finishing the installation, please double check the clearance around each airspring through the entire wheel travel and the steering travel. Be sure to check for proper tire clearance and for proper ground clearance throughout the entire suspension movement. Take the vehicle for a short test drive and check it again.

## **REMEMBER:**

THE AIRSPRING BELLOWS MUST NOT TOUCH ANY THING AT ANYTIME!
A MINIMUM OF 2" OF GROUND CLEARANCE MUST BE MAINTAINED WHEN THE AIRSPRING IS COMPLETELY DEFLATED.

If you have any questions concerning the air ride system, please don't hesitate to call us. we want to insure that your installation is done as safely as possible, and that it will be reliable for years to come.

\*\*AIR RIDE TECHNOLOGIES\*\* 812.482.2932\*\*



# AIRSPRING DIMENSION CHART

PART #	TYPE	Capacity @100psi	Compress Height	Ride Height	Max. Height	Max Diameter	Bolt Pattern
255C [F695 7]	Double Convoluted	2040#	3"	4.5"-5.5"	7"	6.5"	A=1.75 B=.875
224C [F033 5	Double Convoluted	3150#	3"	5"-6"	8"	8.0"	A=2.75 B=1.312
26C [F732 5]	Double Convoluted	3400#	3"	5"-6"	10"	8.5"	A=2.75 B=1.312
20 [F690 8]	Double Convoluted	4790#	3"	7"-8"	11"	9.9"	A=3.50 B=1.75
F9000	Tapered Sleeve	1500#	4.5	8"-9"	12"	5"	A=2.75 B=1.312
F9002	Tapered Sleeve	1500#	4.5	7"-8."	11"	5"	A=2.75 B=1.312
F9003	Tapered Sleeve	1500#	4.5	6.5"-7"	10.5"	5"	A=2.75 B=1.312
F9010	Tapered Sleeve	2000#	6.5"	10.5"- 11.5"	16"	6.5"	.750 SAE/.250npt
7012	Rolling Sleeve	1020#	4"	7.5"-8.5"	13"	5"	.750SAE/.125npt
7076	Rolling Sleeve	800#	3.5"	5"-6"	9"	4"	.750SAE/.125npt

CAUTION!!! EXCEEDING THESE DIMINSIONS MAY RESULT IN SUDDEN AIRSPRING FAILURE! PROPER CLEARANCES MUST BE MAINTAINED AT ALL RIDE HEIGHTS AND STEERING ANGLES. BUMPSTOPS MUST BE USED TO LIMIT SUSPENSION TRAVEL BEFORE THESE DIMENSIONS ARE EXCEEDED.

PLEASE CALL AIR RIDE TECHNOLOGIES IF YOU HAVE ANY QUESTIONS.



Rear suspension w/ 4 link and air ride

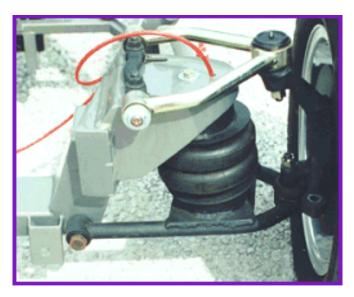


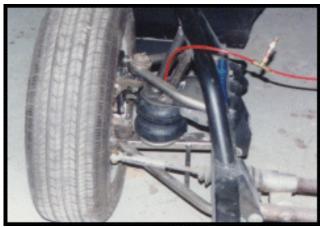
Mustang II w/ tubular control arm [rear view]



Mustang II front end fully compressed

Rear "pro street " installation [fully extended]





Aftermarket Mustang II installation [replaces coilover shock]



Camaro / Nova installation

Mustang II w/ tubular control arm [front view]



Mustang II w/ tubular arm



Optional upper front shock mounting