

AIR LIFT 1000

ADJUSTABLE AIR SPRING SUSPENSION

by



MN-360
(05912)
ECN 2813

KIT No. 81560

Please read these instructions completely before proceeding with installation

Air Spring Kit Parts List

Item	Description	Quantity
A	Air Spring	2
B	Upper & Lower Protectors	4



A



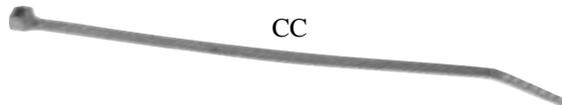
B

Air Line Assembly Parts List

Item	Description	Quantity
AA	Air Line Assembly	1
BB	Air Line Clip	2
CC	Tie Strap	4
DD	Valve Cap	2
EE	5/16" Hex Nut	4
FF	Rubber Washer	2
GG	Star Washer	2
HH	5/16" Flat Washer	2
II	3/8" Lock Nut	2



BB



CC



DD



EE



FF



GG



HH

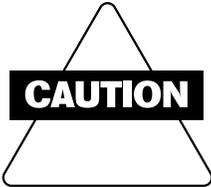


II

Tools Needed

Open-end or box wrenches
Vise Grips
Ratchet with deep well sockets
1" to 1.5" Hole Saw
Heavy Duty Drill

Hoist or Floor Jacks
Safety Stands
Safety Glasses
Air Compressor, or Compressed Air Source
Spray Bottle with Dish Soap/Water Solution



Compressed air can cause injury and damage to the vehicle and components if it is not handled properly. For your safety, do not try to inflate the air springs until they have been properly secured to the vehicle.

If vehicle has black O.E.M. air springs to be replaced start at Step I for removal of old air springs. If this is a new installation start with Step II.

I. Removal BLACK O.E.M Air Springs



Set brake, block wheels and jack up front of vehicle. Place safety stands under frame and allow suspension to be fully extended.

Deflate air springs by removing the valve cores using a tooled valve cap or a knife to puncture the air spring.



Use 1" - 1 1/2" hole saw cutter (drill bit removed), to cut valve out of the air spring.

Clamp vise grips on the bottom of the air spring and pull the air spring through the hole, twisting as you pull. Spraying the old bag with a soapy water solution may ease removal.

Remove the upper protector through the side of the coil.



II. Install the Air Spring

Remove black valve cap and roll the air spring up (A) toward the stem end to exhaust as much air as possible.



Install black valve cap to maintain this compressed shape.

Note: You may notice some discoloration of the cylinder in the “rolled up” condition. This is normal and does not harm or indicate damage to the cylinder in any way. The “discoloration” actually reflects the natural color of the polyurethane material before we add the red pigment.



Unroll the air spring and fold it lengthwise as shown. Use string to hold it in this position, if necessary. You're ready to install.





Check the hole in the lower control arm and deburr edge if necessary to prevent damage to the air spring. Insert the air spring through the hole in the lower control arm (valve stem facing down). Again, spraying with a soapy water solution is helpful.

Push up with a twisting action into the coil, leaving about 2" out of the coil.

III. Install Upper Protector



Before pushing the air spring completely into the coil, insert and position the upper protector (B) on the stud on top of the air spring. A light coating of grease on the top side will help hold it in place.

IV. Install Lower Protector



Push air spring into coil spring. Remove string from the air spring, if used.

Once the bag is in place, insert and position the lower protector (B) by pushing the air spring up and sliding the protector under the air spring.

V. Install Air Line

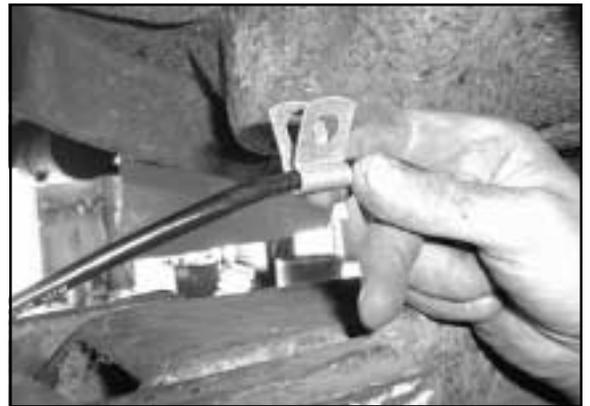


Lower the air spring guiding the valve stem through the hole in the protector.

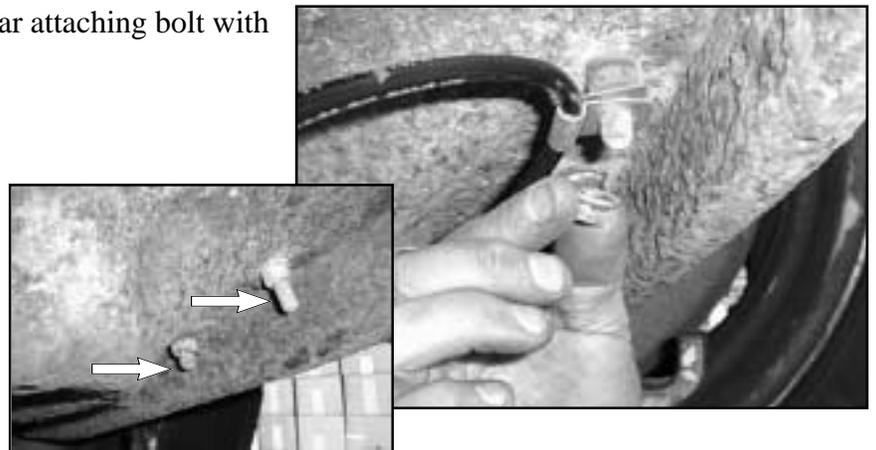
Attach the elbow fitting on the air line(AA) to the valve stem. Orient the elbow and air line to line up with existing sway bar attaching bolts, then finger tighten the elbow nut.



Place the supplied clip (BB) around the air line.



Attach the clip to the existing sway bar attaching bolt with the provided 3/8" lock nut (II).



Tighten the 3/8" lock nut (II) using a 9/16" ratchet.





Route air line up the lower control arm toward the center of the vehicle.



Be sure that the air line goes over the top of the control arm and along the support frame.

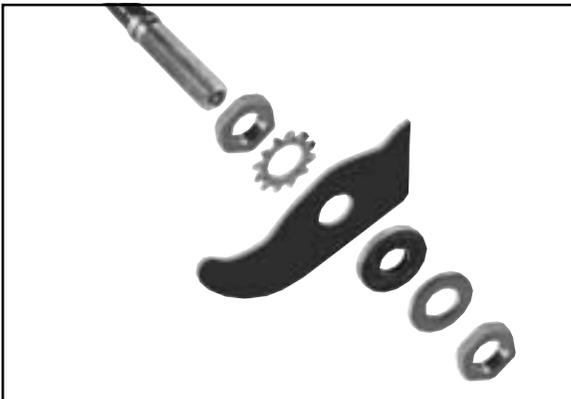


Route the air line through the frame to a selected valve stem mounting location. Secure the air line with plastic tie straps (CC) away from brake lines and battery.



Choose a convenient location for mounting the inflation valves. Make sure there is enough clearance around the inflation valve for an air chuck. Popular locations for the inflation valve are the front bumper, license plate recess or under the hood on a radiator bracket.

Drill a 5/16" hole for the inflation valve.



Mount inflation valve as illustrated (Rubber washer is for outside weather seal). Tighten the outside hex nut (EE) with an 1/2" wrench.

Repeat these procedures for the other side of vehicle.

VI. Inflation Decal

Install the minimum/maximum air pressure decal in a highly visible location. We suggest placing it on the driver's side window, just above the door handle.

VII. Checking for Leaks

Inflate the air spring to 60 p.s.i. Spray all connections and the inflation valves with a solution of 1/3 dish soap and 2/3 water to check for leaks. You should be able to spot leaks easily by looking for bubbles in the soapy water. Now adjust air pressure for optimal comfort and performance - minimum 60 psi and maximum 90 psi.

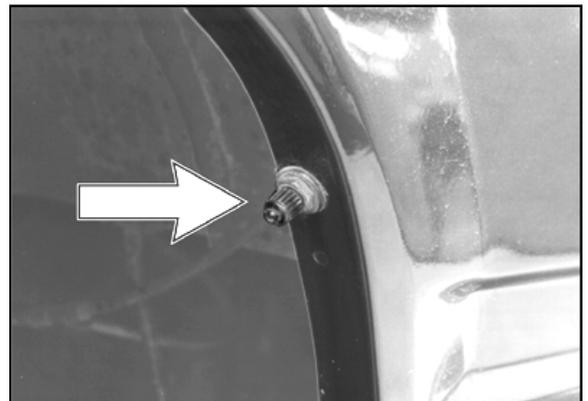


Check the air pressure again after 24 hours. A 2 to 4 p.s.i. loss after initial installation is normal. Retest for leaks if the loss is more than 5 lbs.

VIII. Fixing Leaks

1. Valve Core
Tighten the valve core with a valve core tool.
2. Air Line Connection
Tighten the elbow fitting on the valve stem of the air spring.

If the preceding steps have not resolved the problem, call Air Lift Technical Service at 1-800-248-0892 for assistance.



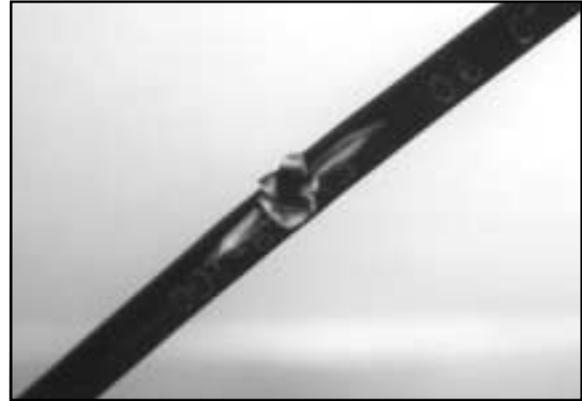
Troubleshooting Guide

1. Problems maintaining air pressure

WITHOUT ON-BOARD COMPRESSOR



Leak test all air line connections. Repair or replace as needed. See page 7 to repair.



Inspect air line for holes and cracks. Replace as needed.



Inspect air lines to be sure it is not pinched. Tie straps may be too tight. Replace strap.



A kink or fold in the air line. Re-route as needed.



Leak test the inflation valve for leaks at the air line connection or dirt or debris in the valve core. See page 7 for repair.

You have now tested for all of the most probable leak conditions that can be easily fixed. At this point the problem is most likely a failed air spring - either a factory defect or an operating problem. We suggest that you return the vehicle to your installer. If self-installed or you are the professional installer, please call Air Lift at 1-800-248-0892 for assistance or a replacement air spring.

Post Installation Checklist (TO BE COMPLETED BY OWNER)

- _____ 1. Overnight Leakdown Test - Recheck air pressure after vehicle has been used for 24 hours. If pressure has dropped more than 5 p.s.i., you have a leak that must be fixed. Either fix the leak yourself (see page 7) or return to the installer for service.
- _____ 2. Air Pressure Requirements - I understand that the air pressure requirements of my air spring system are as follows:

Minimum _____ Maximum _____

Exceeding the maximum recommended air pressure will result in the air spring “bulging out” between the coils spring which may cause the air spring to be pinched or rubbing a hole into the cylinder.

Maintenance and Operations

Motorhomes and Commercial Chassis

MINIMUM AIR PRESSURE	MAXIMUM AIR PRESSURE
40 psi	90 psi

Trucks and Passenger Vans

MINIMUM AIR PRESSURE	MAXIMUM AIR PRESSURE
10 psi	50 psi

By following these steps, vehicle owners should obtain the longest life and best results from their air springs.

1. Check the air pressure in the air springs weekly.
2. Always maintain at least the recommended minimum air pressure to prevent the air spring from being pinched. Never inflate beyond the recommended maximum air pressure.
3. If you develop an leak in the system, use a soapy water solution to check all air line connections and the inflation valve core before deflating and removing the air spring. (See page 7.)
4. Always add air to springs in small quantities, checking the pressure frequently. Air springs require less air volume than a tire and inflate quickly.

Notes

You may find this space useful for recording information about your system (i.e. weekly pressure readings). Also record any information from your installer or Air Lift technical assistance personnel.



Thank you for purchasing Air Lift Products

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