

Atlas Air A5000

**Kit Number:
AA57375**

**Fits:
RAM 1500 4WD**

Engineered and Assembled in the USA

Installation Instructions

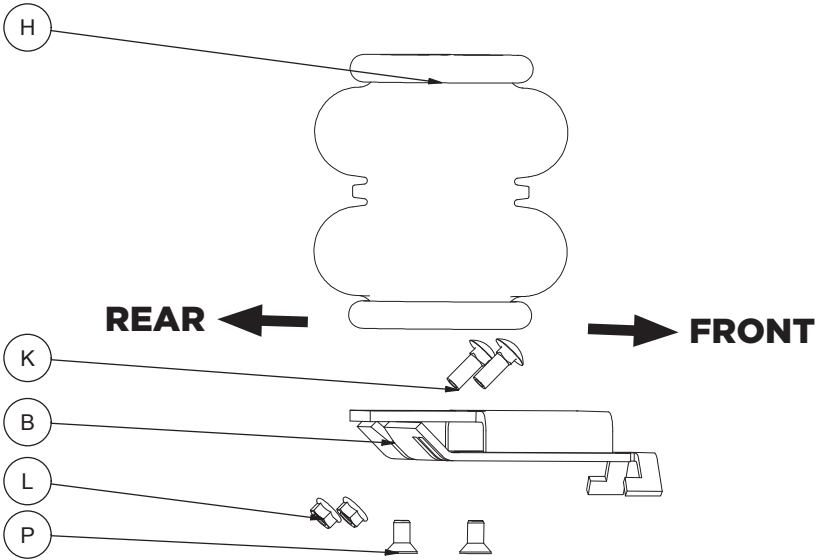
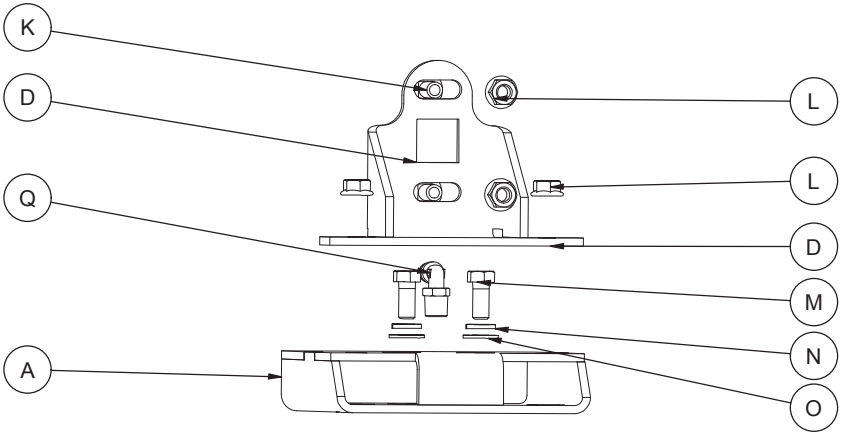
Before Getting Started

For optimal performance and safety, read all instructions thoroughly before beginning the installation. Failure to read and follow these instructions may lead to improper installation and potential safety risks.

Tools Needed

- Standard and metric open-end or box wrenches
- Ratchet
- Standard and metric, regular and deep-well sockets
- 7/32" Hex-key wrench (socket preferable)
- 9/16" Ratchet wrench
- Torque wrench
- Die grinder or angle grinder with cut off wheel
- Needle nose pliers
- China marker or equivalent
- Hose cutter, razor blade, or sharp knife
- Hoist or floor jacks
- Safety stands
- Safety glasses
- Black paint or undercoating
- Air compressor or compressed air source
- Spray bottle w/ dish soap/water solution

AA57375 Exploded Installation View



Parts List

Part	Part No.	Part Description	QTY
A	07204	Frame bracket	2
B1	03079	LH lower bracket	1
B2	03088	RH lower bracket	1
D	11652	Upper brace	2
H	58403	Air spring	2
K		3/8"-16 X 1" Carriage bolt	12
L		3/8" Serrated flange lock nut	12
M		3/8"-16 X 7/8" Hex cap screw	4
N		3/8" Lock washer	4
O		3/8" Flat washer	4
P		3/8"-16 X 3/4" Flat head socket cap screw	4
Q		90-degree Swivel air fitting	2
R*		3/8" Wire bolt leader tool	2
S*	13978	Spacer	1
T*		M8-1.25 X 35 Hex flange bolt	1
U*		Heat shield	1
AA*		Air line assembly	1
BB*		Zip ties	6
CC*		Valve cap	2
DD*		Star washer	2
EE*		Rubber washer	2
FF*		M8 Flat washer	2
GG*		5/16" Hex nut	4

* These parts are not shown in the Exploded Installation View section

Introduction

This guide is here to walk you through setting up and taking care of your Atlas Air™ A5000 air suspension kit. They are built tough—commercial-grade and reinforced for durability. Think of the air springs like tires: layers of rubber and strong cords work together to manage pressure and maintain shape to help control your ride.

With Atlas Air A5000, you'll get up to 5000 pounds (2268 kg) of support to keep your ride level, and you can fine-tune the pressure anywhere between 5 and 100 PSI (0.34 to 7 BAR). Before diving into the installation or doing any kind of upkeep, make sure to read through the entire manual—it'll save you time and headaches down the road.

Symbols



THIS MEANS THERE'S AN IMMEDIATE AND SERIOUS RISK. IF IGNORED, IT WILL LEAD TO SEVERE INJURY OR EVEN DEATH. ALWAYS TAKE THESE WARNINGS SERIOUSLY.



SIGNALS A DANGEROUS SITUATION OR UNSAFE ACTION THAT COULD CAUSE SEVERE INJURY OR DEATH. IT'S NOT A GUARANTEE, BUT IT'S A BIG RISK—PROCEED CAREFULLY.



These callouts highlight useful advice or important reminders to keep you on track during the process. Don't skip them—they often save time.



Little tricks of the trade to help installation go more smoothly. These tips can make a big difference if you're aiming for a clean, efficient job.

Information

This kit does not increase the Gross Vehicle Weight Rating (GVWR) or payload capacity of your vehicle. Always refer to your vehicle's Safety Compliance Certification Label or owner's manual, and do not exceed the manufacturer's maximum load rating.

- **Gross Vehicle Weight Rating (GVWR):**

The maximum allowable weight of a fully loaded vehicle, including passengers, cargo, and fluids. This value—along with other important specifications like tire size, rim size, and inflation pressure—is located on the vehicle's Safety Compliance Certification Label.

- **Payload:**

The maximum combined weight of passengers and cargo your vehicle is designed to carry. Payload is calculated by subtracting the vehicle's base curb weight from its GVWR.

Air Pressure Guidelines

While Atlas Air A5000 air springs are engineered to handle a **maximum inflation pressure of 100 PSI (7.0 BAR)**, the actual pressure required will vary based on the vehicle's load and total weight. Always adjust air pressure according to your specific load conditions—**not solely based on the maximum pressure limit.**

Ride Height and Suspension Limits

Always maintain the correct ride height by adjusting the air pressure based on your current load. Shock absorbers typically act as the suspension limiters on extension. If they do not, particularly on off-road vehicles, consider using limiting straps to prevent overextension.

Brake System Considerations

Vehicles equipped with a **rear brake proportioning valve** may experience changes in braking performance when using a load-assist product. **Consult your dealer** before installation. If your vehicle **does not** have a proportioning valve or is equipped with an **anti-lock brake system (ABS)**, the installation of an air spring kit **will not affect braking performance.**

System Install

Build Air Springs

1. Install Air Fittings

Install the elbow swivel air fittings (Q) into the top port of each air spring (H). Tighten the fittings finger-tight, then rotate an additional 1/2 turns. Once assembled, each unit will be left- or right-hand specific. Ensure the air fitting is positioned on the opposite side of the offset in the lower bracket. The angled up flanges on the lower bracket should point toward the front of the truck.

2. Attach Upper Brackets

Align the upper brackets (B) with the air spring so the large hole in the bracket goes over the air fitting. Attach the bracket using 3/8"-16 X 7/8" hex cap screws (M), 3/8" split lock washers (N), and 3/8" flat washers (O). Leave this hardware finger-tight to allow for adjustment during final installation.

3. Attach Lower Brackets

Position the lower brackets so the fingers are pointing down and on the same side as the air fitting on top of the air spring—left-hand (B1) and right-hand (B2). Secure using 3/8"-24 x 3/4" flat-head socket cap screws (P). Torque the screws to no more than 20 lb-ft (27 Nm).



Ensure correct assembly and orientation. With the assemblies in front of you and the air fittings towards you, the left (driver side) assembly should have the angled side of the upper bracket on the right and the fingers of the lower bracket facing you. The right (passenger side) assembly should have the angled side of the upper bracket on the left, facing the other assembly, and the fingers of the lower bracket facing you.

Vehicle Preinstall Steps

1. Raise and Support the Vehicle

Lift the vehicle and securely support the frame using safety stands. Lower the axle far enough to create space for positioning the air spring assemblies between the frame and the axle.

2. Remove the Jounce Bumpers

Twist and pull to remove the jounce bumpers from their mounting cups. This may require firm effort.

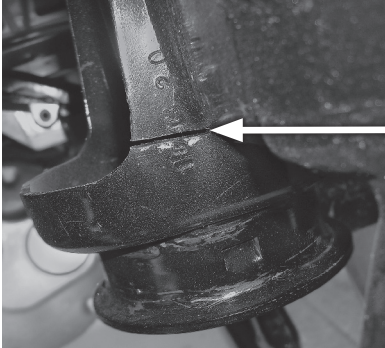
3. Trim the Jounce Bumper Brackets

The jounce bumper cup is required to be cut for kit installation. On the jounce bumper cup on the inside of the frame area, draw a line on both

sides of the cup with a marker, slightly above the bottom of the frame. Using a die grinder or angle grinder with a cutoff wheel, carefully cut along the marked lines on both sides. Stop short of the frame to avoid damage. If the weld extends beneath your cut, grind it down as needed. Do not discard the jounce bumper bracket—it may be reused.

MAJOR ALERT

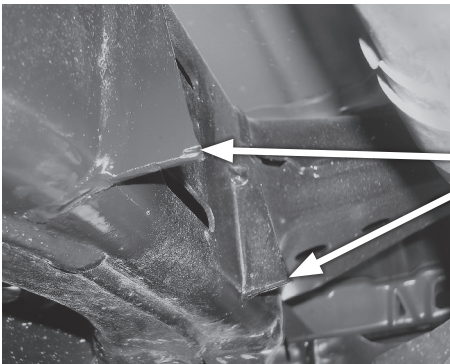
Do not cut into the frame. Stop short and use a hammer to tap and separate the bracket from the frame if needed.



Cut the jounce bumper bracket to a level above the bottom of the frame. Do not cut into the frame. Passenger's (right) side shown.

4. Clean and Protect the Cut Surfaces

Use the cutoff wheel to remove sharp edges left from trimming. Clean and paint any exposed metal on the remaining portion of the jounce bumper bracket to prevent corrosion.



Remove sharp edges and paint.

5. Relocate the Brake Line Holder

The brake line holder on the inside of the driver's (left) side frame rail, just above the axle, must be spaced up to accommodate the upper brace (S). Remove the factory bolt and discard it. Insert the provided spacer (F) between the holder and the bracket, then reinstall the holder using the supplied M8-1.25 x 35 hex flange bolt (T). Tighten securely.

Air Spring Installation into Vehicle

1. Install Carriage Bolts Through the Frame

Using the 3/8" wire bolt leader tool (R), thread each over a 3/8"-16 x 1" carriage bolt (K). Insert the bolt leaders through the square access hole in the frame and feed them through the slotted openings above and below the square access hole. This will allow the carriage bolts to be positioned properly for mounting.

2. Position Frame Braces

With the carriage bolts in place, guide the wire tools through the corresponding holes in the brace (D) and position the brace against the frame.

3. Secure Frame Braces Loosely

Carefully remove the wire tool from the top carriage bolt first and install a 3/8"-16 serrated flange nut (L) finger-tight. Repeat for the bottom carriage bolt. Leave both nuts loose at this stage. Repeat the process for the passenger side.

4. Preload Lower Bracket on Driver's Side

Insert a 3/8"-16 x 1" carriage bolt (K) into the slotted opening at the front of the driver's (left) side lower bracket.

5. Position Assemblies on Axle

If not done already, lower the axle to allow enough clearance for installing both driver and passenger side air spring assemblies.

6. Install Driver-Side Assembly

Set the driver-side air spring assembly into position on the axle with the preloaded carriage bolt still seated in the slot. Ensure the rear bracket fingers hook beneath the jounce bumper strike plate. Push the assembly forward while aligning the preloaded bolt with the mounting hole in the front face of the strike plate. Install a 3/8"-16 serrated flange nut (L), but leave it loose.

7. Install Forward Carriage Bolt

Insert another 3/8" carriage bolt (K) through the remaining hole in the front of the lower bracket.

8. Secure Forward Carriage Bolt

Use a socket and extension to access and install a 3/8"-16 serrated flange nut (L) onto the previously positioned carriage bolt. You may need to slightly pull the bolt outward to angle the threads for easier engagement. Use the lower control arm slot to feed the extension through while threading the nut.

9. Repeat Installation on Passenger Side

Repeat steps 4-8 for the passenger (right) side. Once installed, torque all lower hardware to 31 lb-ft (42 Nm).

10. Attach Upper Brackets to Frame Braces

Raise the axle until the upper brackets contact the frame braces. Insert 3/8"-16 x 1" carriage bolts (K) up through the square holes in the upper brackets and through the frame braces. Install 3/8"-16 serrated flange nuts (L) and snug by hand.

INSTALLER'S HINT

Use needle-nose pliers to guide the carriage bolts through the holes if needed.

11. Align and Torque Upper Assemblies

Ensure that the upper brackets sit flush against the frame. Push the assemblies forward until the upper brace contacts the remaining jounce bumper bracket. Torque the frame brace hardware first, followed by the upper bracket-to-brace hardware to 31 lb-ft (42 Nm).

INSTALLER'S HINT

Passenger-side lower nuts may be hard to access due to the exhaust. If you cannot use a torque wrench and socket, tighten securely with a ratcheting wrench.

12. Raise the Axle and Remove Safety Stands

Raise the axle slightly and remove the safety stands from under the vehicle.

13. Adjust and Align Air Springs

Adjust the upper air spring assemblies so they are as perpendicular as possible to both upper and lower brackets by shifting them within the bracket slots.

14. Tighten Upper Air Spring Mounting Bolts

Use a 3/8" ratcheting wrench to snug the upper air spring bracket bolts. Due to limited access, a torque wrench may not be usable—snug bolts without overtightening.

REMEMBER...

It is acceptable for the air spring assemblies to not appear perfectly aligned when installed.

INSTALLER'S HINT

Route the air line along the top of the frame, forward of the axle, and then down to the fitting. After cutting the line to the required length, install the thermal sleeve over the passenger-side air line before inserting it into the fitting. Secure air lines to the upper coil spring mount using the provided zip ties (BB).

Air Lines Installation

1. *Select Schrader Valve Locations*

Choose suitable locations for the Schrader valves. If necessary, drill a 5/16" (8 mm) hole at each selected location. Common locations for mounting are inside fuel tank filler door, inside rear wheel wells, or by the license plate mount or rear bumper area.

2. *Measure and Cut the Air Line*

Measure the length of air line needed to reach your intended Schrader valve locations. Cut the air line (AA) using a sharp razor blade or hose cutter to make clean, square cuts. Do not use scissors or wire cutters, as these can deform the tubing and compromise the seal.

3. *Route and Secure the Air Line*

Route the air line (AA) from each air spring to the chosen Schrader valve locations. Plan the route to avoid sharp edges, moving parts, and heat sources. Once routed, use zip ties (BB) to secure the air line to stable points along the vehicle chassis. Do not pinch or kink the line. Leave at least 2" (51 mm) of slack to accommodate movement. The air line's minimum bend radius is 1" (25 mm).



Maintain a minimum of 5 1/2" (140 mm) clearance between all air lines and any part of the exhaust system. Avoid routing air lines over sharp edges or making tight bends.

4. *Install Schrader Valves*

Install the Schrader valves into the selected locations.

Heat Shield Installation (if provided in kit)

1. *Position the Heat Shield*

Place the heat shield over the exhaust pipe near the air spring. Maintain at least 1/2" (13 mm) of clearance between the shield and the exhaust surface. Depending on the design of the heat shield included in your kit, you may need to bend the tabs or the shield itself to achieve proper fitment and spacing.

2. *Install the Air Line Thermal Sleeve (if included)*

If your kit includes a thermal sleeve, slide it over the section of air line that runs closest to the exhaust. This sleeve helps protect the line from excessive heat exposure.

3. *Secure Components with Hose Clamps*

Use hose clamps to secure the heat shield and thermal sleeve (if used). Apply double clamps where needed for added security. Make final adjustments to ensure all components are properly spaced and firmly in place.

Checklist

Ensure the air suspension system is correctly installed and safe for operation by completing the following checks:

1. Clearance Verification

Inflate the air springs to 50 PSI (3.45 BAR). Confirm a minimum clearance of 1/2" (13 mm) between the air springs and any adjacent components, including tires, brake assemblies, the vehicle frame, shock absorbers, and brake lines. Adjust as needed to prevent contact during operation.

2. Heat Clearance Check

Verify that all air springs and air lines are positioned at least 5 1/2" (140 mm) away from any heat sources.

3. Leak Inspection

With the system pressurized to 50 PSI (3.45 BAR) inspect all fittings, air lines, and connections for leaks. All leaks must be fully resolved prior to road testing.

4. Road Test Procedure

Inflate the air springs to the recommended operating pressure and conduct a 10-mile (16 km) road test. Upon completion, re-inspect for adequate clearance, air leaks, and secure fasteners.

5. Torque Confirmation

After 500 miles (800 km) of driving, recheck and torque all hardware to the specified values to ensure long-term stability and safety.

Adjusting Air Pressure

Stability

Properly adjusting air pressure is key to achieving both vehicle stability and correct ride height. Begin by increasing pressure until the suspension feels firm and controlled—without exceeding the maximum of 100 PSI (7 BAR). Ensure the vehicle sits level across all four corners. Uneven loads may require redistributing cargo or adjusting air pressure side to side.

Comfort

Ride quality is also influenced by air pressure. Too much or too little can cause harshness or instability. As a general rule:

- If the vehicle frequently bottoms out on the frame, increase air pressure.
- If the ride feels overly stiff or harsh, reduce air pressure slightly.

Adjust gradually to find the best balance between comfort and control.

Guidelines

1. Check System Pressure Weekly

Inspect the air pressure in the system at least once a week to ensure consistent performance and ride quality.

2. Maintain Proper Ride Height

Always operate the vehicle at the recommended ride height. Do not exceed 100 PSI (7.0 BAR) under any circumstances.

3. Inspect for Air Leaks as Needed

If you suspect a leak, follow these steps to identify and address the issue:

- a. Inflate the air springs to 50 PSI (3.45 BAR).
- b. Spray all air line connections and the inflation valve with a mild solution of liquid dish soap and water.
- c. Wait 30 seconds and observe for any bubbles, which indicate a leak.
- d. Recheck the system pressure after 24 hours. A pressure loss of 2–4 PSI (0.14–0.28 BAR) is normal after initial installation. If the pressure drops by more than 5 PSI (0.34 BAR), recheck for leaks.
- e. Once testing is complete, adjust the air spring to the minimum pressure required for proper ride height.

4. Inspect Hardware and Component Alignment

Periodically check that all fasteners are properly torqued. Also, check for signs of rubbing or misalignment, and realign components as needed.

5. Clean the Air Springs

Occasionally, spray the air springs with clean water to remove mud, dirt, or debris that may collect during use.

6. Lift the Vehicle with Care

If lifting the vehicle by the frame, reduce system pressure to 5 PSI (0.34 BAR) to relieve tension on the air springs and mounting hardware.

Repair Guide

Fixing Leaks on Barbed Fittings

1. Cut the air line 1 1/2" (38 mm) behind the existing fitting.
2. Use pliers or locking pliers to twist and pull the air line off the fitting.

**REMEMBER...**

Do not cut lengthwise, as this may damage the barbs and lead to future leaks.

3. Reinstall the air line and clamp (if applicable), making sure the air line fully covers all barbs for a proper seal.

Fixing Leaks on Push-to-Connect (PTC) Fittings

To Disconnect:

1. Release all air pressure from the system.
2. Push the air line inward toward the fitting.
3. While holding the air line in, press the collar inward toward the fitting.
4. With the collar depressed, pull the air line out.

Before Reconnecting:

5. Cut off the end of the air line just beyond the witness mark to ensure a clean, undamaged sealing surface.
6. If the fitting leaks at the threads, remove it, apply fresh thread sealant, and reinstall it 1 1/2 turns beyond finger-tight.

To Reconnect:

7. Push the air line into the fitting until fully seated.
8. Gently pull back on the air line to verify a secure connection.

Warranty

What this warranty covers

Atlas Products Company provides a warranty to the original purchaser of its Load Support Products, for the periods of time listed at AtlasProducts.com, by product line, from the date of original purchase, that the products will be free from defects in workmanship and materials when used on cars and trucks as specified by Atlas Products Company and under normal operating conditions, subject to the requirements and exclusions set forth below.

What this warranty does not cover

The warranty does not apply to products that have been improperly applied, improperly installed, or that have not been maintained in accordance with the installation instructions furnished with all products. This warranty does not apply and is void if damage or failure is caused by: accident, abuse, misuse (including but not limited to racing or off-road activities or commercial use), abnormal use, faulty installation, liquid contact, fire, earthquake or other external cause; operating the product outside Atlas Products Company's instructions, specifications or guidelines; or service, alteration, maintenance or repairs performed by anyone other than Atlas Products Company to the product from its purchased condition. This warranty also does not apply to: consumable parts, such as batteries, cosmetic damage, including but not limited to scratches or dents; defects caused by normal wear and tear or otherwise due to the normal aging of the product, or if any serial or identification number has been removed or defaced from the product. Atlas Products Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

Limitation of liability

To the extent permitted by law, this warranty and the remedies set forth herein are exclusive and in lieu of all other warranties, remedies and conditions, whether oral, written, statutory, express or implied. ATLUS PRODUCTS COMPANY DISCLAIMS ALL STATUTORY AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS TO THE EXTENT PERMITTED BY LAW. To the extent such warranties cannot be disclaimed, such implied warranties shall apply only for the warranty period specified above. Please note that some states do not allow limitation on how long an implied warranty (or condition) lasts. So the above limitation may not apply to you.

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How to get service

If a defect in workmanship or materials causes your Atlas product to become inoperable within the warranty period, before returning any defective product, email Atlas Products Company at support@atlusproducts.com. The consumer shall be responsible for removing the defective product from the vehicle (including any labor charges) and returning it, shipping costs prepaid, to Atlas Products Company for verification. You must prove to the satisfaction of Atlas Products Company the date of original purchase of your Atlas product. A minimum \$10 shipping and handling charge (plus applicable sales tax) will apply to all warranty claims. You must also pack the product to minimize the risk of it being damaged in transit. If we receive a product in damaged condition as the result of shipping, we will notify you and you must seek a claim with the shipper.

What Atlas Products Company will do

If you submit a valid claim to Atlas Products Company during the warranty period, and Atlas determines that the product was defective, Atlas Products Company will, at its option, repair your Atlas product or furnish you with a new or rebuilt product. Atlas Products Company will not reimburse you for repairs or replacement parts provided by other parties. Your repaired or replacement Atlas product will be returned to you (subject to payment of the required warranty claim shipping and handling charge), and it will be covered under the warranty for the balance of the warranty period, if any. When a product or part is replaced, any replacement item becomes your property and the replaced item becomes the property of Atlas Products Company. You are responsible for the installation/reinstallation (including any labor charges) of the product.

How the law relates to this warranty

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. By this warranty, Atlas Products Company does not limit or exclude your rights except as allowed by law. To fully understand your rights, you should consult the laws of your state.

Customer Support

For Customer Service support, please contact us at:
support@atlusproducts.com

Atlas Products Company reserves the right to make changes and improvements to its products and publications at any time.



Engineered and Assembled in the USA

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