

## **Atlas Air A5000**

**Kit Number:  
AA26250**

**Fits:  
Ford Super Duty F-250,  
F-350 & F-450 Pick-up  
(Non-commercial)**

*Engineered and Assembled in the USA*

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**Installation Instructions**



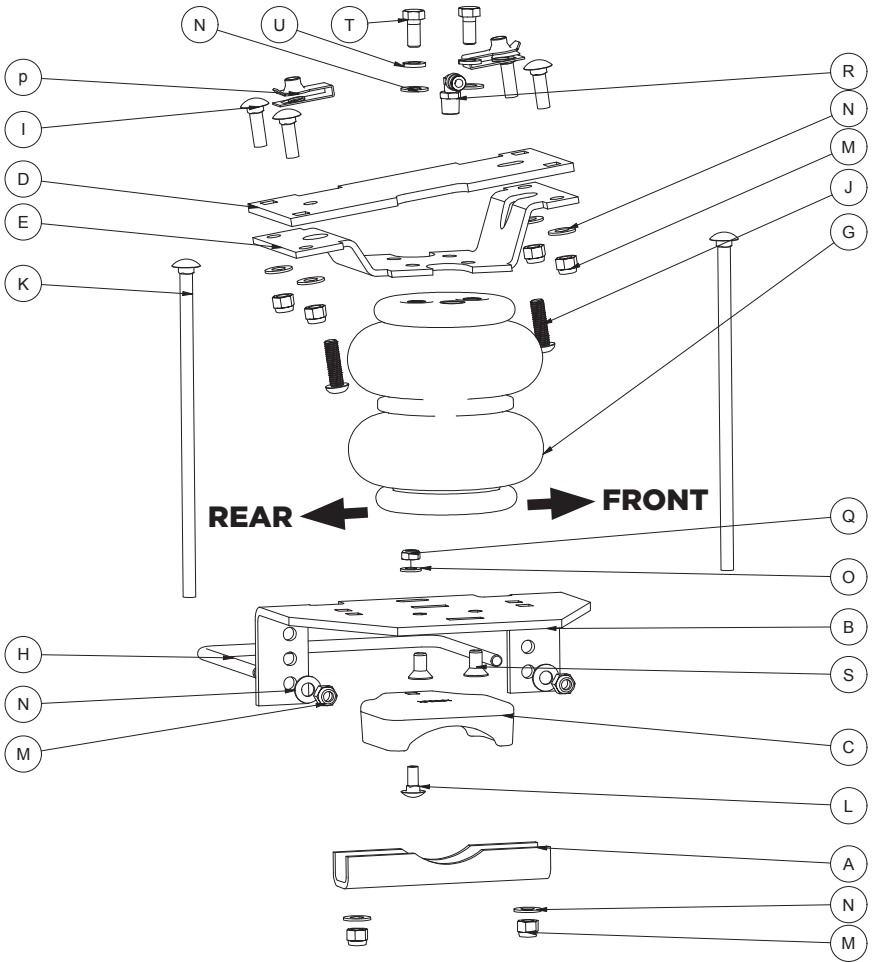
## **Before Getting Started**

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 sockets
- 5/16" drill bit (very sharp)
- Heavy-duty drill
- Torque wrench
- Standard and metric hex-key wrenches
- Flat-tip screwdriver
- Hose cutter, razor blade, or sharp knife
- Hoist or floor jacks
- Safety stands
- Safety glasses
- Air compressor or compressed air source
- Spray bottle w/ dish soap/water solution

# AA26250 Exploded Installation View



# Parts List

Part	Part No.	Part Description	QTY
<b>A</b>	01531	Clamp bar	2
<b>B</b>	03092	Lower bracket, main plate	2
<b>C</b>	03225	Lower bracket, cup	2
<b>D</b>	07091	Upper bracket, frame	2
<b>E</b>	11438	Bracket, air spring	2
<b>G</b>	58403	Air spring	2
<b>H</b>		U-bolt	2
<b>I</b>		3/8-16 X 1 1/4" Carriage bolts	8
<b>J</b>		M10-1.50 X 35 Button head cap screw	4
<b>K</b>		3/8-16 X 10" Carriage bolts	4
<b>L</b>		5/16-18 X 3/4" Carriage bolts	2
<b>M</b>		3/8-16 Nylon lock nut	16
<b>N</b>		3/8" Flat washer	20
<b>O</b>		M8 Flat washer	2
<b>P</b>		M10-1.5 Universal nuts	4
<b>Q</b>		5/16-18" Thin nylon lock nut	2
<b>R</b>		90-degree Swivel push to connect fitting	2
<b>S</b>		3/8-16 X 7/8" Flat head socket cap screw	4
<b>T</b>		3/8-16 X 3/4" Hex cap screw	4
<b>U</b>		3/8" Split lock washer	4
<b>AA*</b>		Air line assembly	1
<b>BB*</b>		Zip ties	6
<b>CC*</b>		Valve cap	2
<b>DD*</b>		Star washer	2
<b>EE*</b>		Rubber washer	2
<b>FF*</b>		M8 Flat washer	2
<b>GG*</b>		5/16" Hex nut	4
<b>HH*</b>		Thermal Sleeve	1
<b>II*</b>		Heat Shield	1

\* 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

**CRITICAL RISK**

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.

**MAJOR ALERT**

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.

**REMEMBER...**

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

**INSTALLER'S HINT**

*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 Fitting

Install the 90-degree swivel fitting (R) into the top port of the air spring (G). Tighten finger-tight, then rotate an additional 1 1/2 turns.

### 2. Attach Upper Brackets

Position the upper air spring bracket (E) onto the air spring (G) using one set of mounting holes. Secure it with a 3/8"-24 x 3/4" hex cap screw (T), 3/8" lock washer (U), and 3/8" flat washer (N). Repeat this step for the second air spring, using the opposite set of holes to create left- and right-hand assemblies. Torque all hardware to no more than 20 lb.-ft. (27Nm).

### 3. Insert Carriage Bolts into Lower Brackets

With the lower bracket flanges facing downward towards the ground, insert two 3/8"-16 x 10" carriage bolts (K) through the square holes in the lower bracket main plate (B).

- **For models with sway bars:** use the holes farthest from the flanges on the driver's (left) side and the holes closest to the flanges on the passenger's (right) side.
- **For models without sway bars:** use the holes farthest from the flanges on both sides.

### 4. Attach Lower Brackets to Air Springs

**For sway bar models:** match each lower bracket to its corresponding side (driver or passenger). For models without sway bars, orientation is not side-specific. Place the lower bracket assembly onto the bottom of the air spring and secure using 3/8"-24 x 7/8" flat-head socket cap screws (S). Torque to no more than 20 lb.-ft. (27Nm).



*The flanges on the lower bracket must be on the opposite side of the swivel fitting at the top of the air spring.*

### 5. Install Lower Bracket Cup

Attach the lower bracket cup (C) to the lower bracket main plate, using the hole on the same side as the flanges, with a 5/16"-18 x 3/4" carriage bolt (L). Cap with an M8 flat washer (O) and 5/16"-18 nylon lock nut (Q). Tighten the hardware finger-tight only. It should remain loose enough to allow the bracket to move freely in the slot.

## Vehicle Preinstall Steps

### 1. *Raise and Support the Vehicle*

Raise the vehicle and securely support it using safety stands or an equivalent method. Ensure the axle can be safely lowered away from the frame. This clearance is required to position the air spring assembly between the axle and the frame.

### 2. *Remove the Jounce Bumpers*

Unbolt and remove the jounce bumper assemblies from beneath the frame on both the driver and passenger sides.

### 3. *Remove the Clip-in Studs*

Using a flat-head screwdriver, pry on the hinged end of each clip-in stud and remove all four (two from each side) from the frame.

### 4. *Install Universal Nuts*

Insert the universal nuts (P) into the frame rails. Align the threaded holes in the nuts with the existing frame holes to allow for bolt installation.

**INSTALLER'S HINT**

*A flat-tip screwdriver works well to maneuver the universal nuts into position.*

### 5. *Install Upper Frame Brackets*

Insert the 3/8"-16 x 1 1/4" carriage bolts (I) through the top of the upper frame brackets (D). Mount each bracket onto the frame using the M10-1.5 x 35 mm button-head cap screws (J). Ensure the centered slot cutout and larger round holes in the bracket face inward, away from the tire, and the elongated hole is oriented toward the front of the vehicle. Torque all hardware to 38 lb.-ft. (52Nm).

## Air Spring Installation into Vehicle

### 1. *Position Air Spring Assemblies*

With the vehicle supported by safety stands, lower the axle or raise the body to allow clearance for installation. Place the driver-side (left) and passenger-side (right) air spring assemblies between the axle and frame. Ensure the lower bracket cup rests on the jounce bumper strike plate. Push the lower bracket flush against the leaf spring stack. Its flanges should lock securely against the sides of the U-bolt.

**REMEMBER...**

*On the driver's side, the long carriage bolt should be located between the hard brake line and axle.*

*On the passenger's side, the bolt should be positioned behind the brake line.*

**2. Install U-Bolts**

Position the U-bolts (H) around the jounce bumper strike plate/spacer block, then insert them through the topmost holes in the lower bracket main plates. Cap with 3/8" flat washers (N) and 3/8"-16 nylon lock nuts (M). Snug the bolts evenly to hold the lower bracket flush against the U-bolts—do not torque yet.

**3. Install Lower Clamp Bars**

Place the lower clamp bars (A) over the carriage bolts beneath the axle. Secure with 3/8" flat washers (N) and 3/8"-16 nylon lock nuts (M). Evenly torque the lower clamp bar hardware to 16 lb.-ft. (22Nm). Then return to the U-bolts and torque them to 10 lb.-ft. (14Nm).

**4. Trim Rear Carriage Bolt (If Needed)**

On vehicles equipped with an anti-roll bar, it may be necessary to trim the rear carriage bolt to prevent interference.

**5. Tighten Lower Bracket Cup Nut**

Tighten the nut that secures the lower bracket cup to the main bracket plate. This may require repositioning the wrench multiple times and accessing it from different angles.

**6. Verify Lower Bracket Fitment**

Ensure the lower brackets are correctly seated. If the hard brake line is resting on a carriage bolt, carefully push or pull the line away to provide adequate clearance.

**7. Secure ABS Lines**

Use zip ties (BB) to tie off the ABS lines, ensuring they do not chafe against the carriage bolts. Adjust the hard brake lines as necessary to ensure they are not resting on or in contact with the carriage bolts.

**8. Align and Attach Upper Brackets**

Ensure the 90-degree fittings are pointing inward toward the center of the vehicle. While adjusting the axle or vehicle body height, align the carriage bolts from the upper air spring brackets with the holes in the frame brackets. Once aligned, install 3/8" flat washers (N) and 3/8"-16 nylon lock nuts (M). Snug the hardware, then torque to 31 lb.-ft. (42Nm). Raise the axle or lower the body fully and remove the safety stands.

## 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](http://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.

Except as provided in this warranty and to the extent permitted by law, Atlus Products Company shall not be liable for any direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or arising in connection with the sale, use or repair of Atlus products, or under any other legal theory, including but not limited to loss of use, loss of revenue, loss of actual or anticipated profits, loss of the use of money, loss of business, loss of opportunity, loss of goodwill, and loss of reputation. Atlus Products Company's maximum liability shall not in any case exceed the purchase price paid by you for the Atlus product. Please note that some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## **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](mailto: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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California:  WARNING: Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)