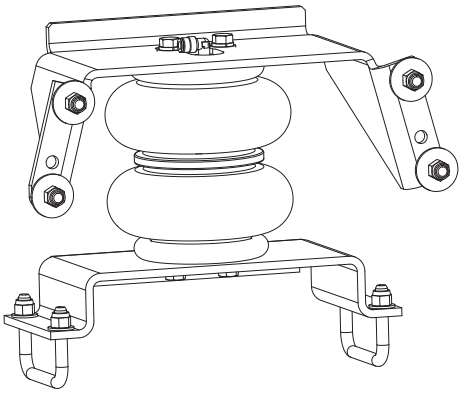


Atlus Air A5000

Kit Number: AA20710

Fits:
Chevrolet, Dodge,
Ford and GMC trucks

Engineered and Assembled in the USA

Installation Instructions

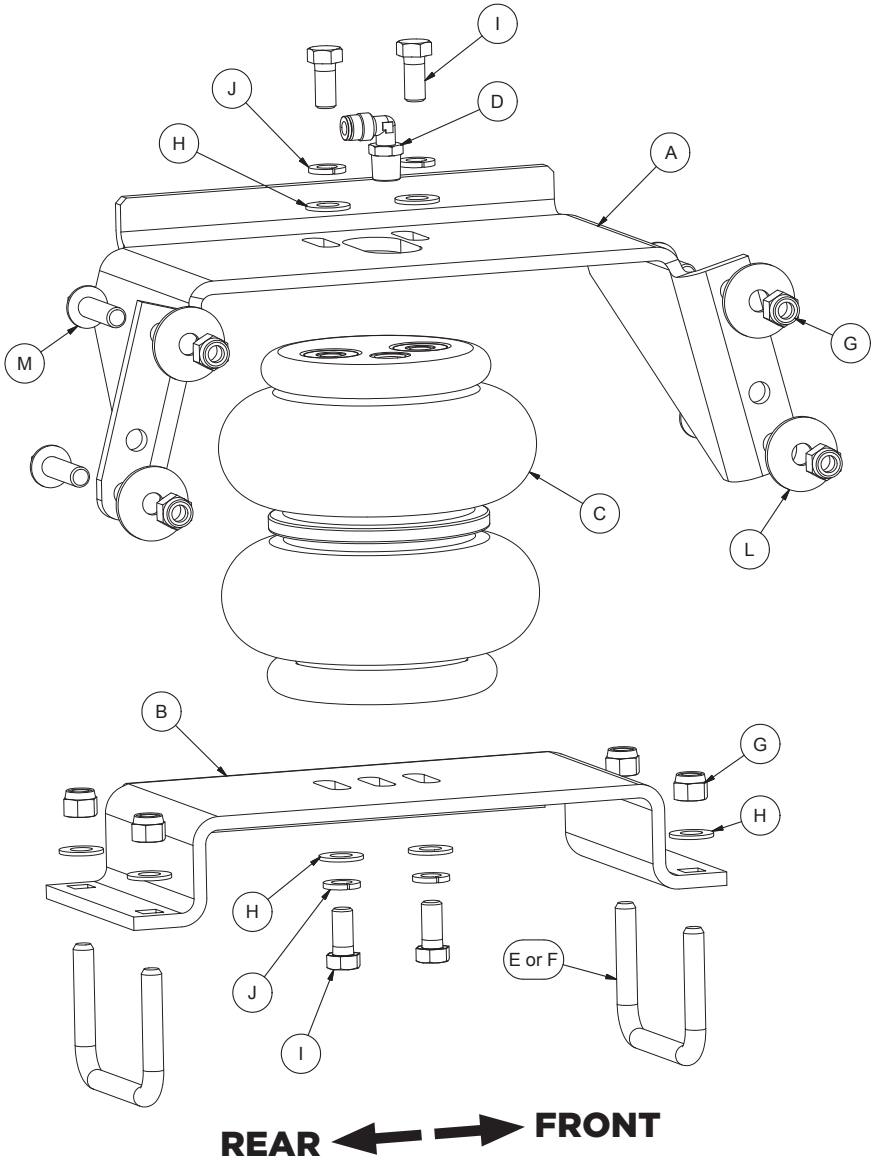
Before Getting Started

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
- Adjustable wrench
- Ratchet
- Standard and metric regular and deep-well sockets
- 3/8″ and 5/16″ Drill bits (very sharp)
- Heavy-duty drill
- Center punch
- Hammer
- Rubber mallet
- Torque wrench
- 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

AA20710 Exploded Installation View



Parts List

Part	Part No.	Part Description	QTY
A	07201	Upper bracket	2
B	03086	Lower bracket	2
C	58403	Air spring	2
D		Push-to-connect (PTC) fitting	2
E		U-bolt	4
F		U-bolt	4
G		3/8" Nylon lock nut	16
H		3/8" Flat washer	16
I		3/8"-16 X 7/8" Hex-head cap screw	8
J		3/8" Lock washer	8
K*	13377	Upper bracket spacer	8
L		3/8" Flat washer	8
M		3/8"-16 X 1 1/2" Washer-head frame bolt	8
N*	01525	Spacer bar	4
O*		1/4" Hex-head cap screw	2
P*	20947	Fender well liner spacer	2
Q*		#12 Flat washer	6
R*		1/4" Nylon lock nut	2
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 Atlus 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 Atlus 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 Atlus 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 Fitting

Thread the 90-degree swivel air fitting into the top port of the air spring (C). Tighten by hand until finger-tight, then turn an additional 1 1/2 rotations. Do not overtighten.

2. Attach Upper Bracket

Place the upper bracket (A) onto the air spring, ensuring the bracket legs face downward.

3. Position on Lower Bracket

Set the air spring assembly onto the lower bracket (B), aligning the two holes in the base of the air spring with the two outer slots on the top surface of the lower bracket.

4. Loosely Attach Upper Bracket Hardware

Secure the upper bracket to the air spring assembly using flat washers (H), lock washers (J), and hex-head screws (I). Leave the hardware finger-tight to allow for final adjustments.

5. Loosely Attach Lower Bracket Hardware

Attach the lower bracket to the air spring assembly using flat washers, lock washers, and hex-head bolts. Again, leave the hardware loose for now.

Ensure the flange on the lower bracket faces outward toward the tire side of the vehicle.

Vehicle Preinstall Steps

1. Verify Clearance

Confirm that there is at least 8" of clearance between the frame and the side wall of rear tire to ensure proper fitment of this kit. Measure and verify clearance before proceeding.

2. Support Vehicle and Adjust Height

Support the vehicle securely with safety stands. Remove the rear wheels and adjust the height as necessary to achieve normal ride height.

3. 1994 and Newer Dodge 4WD Pickups

On late-model 4WD Dodge trucks, it is necessary to remove the inner fender well liner. Carefully drive the center pins through the fasteners using a center punch. Retain the fasteners, as they will be reused along with a special spacer to reattach the liner and provide adequate

clearance for the air spring (Steps are laid out toward the end of the installation manual).

4. Ford Trucks (F-250/F-350)

When installing the upper bracket on Ford F-250 or F-350 models, the mounting bolt holes may align directly over an indent in the frame. This is acceptable and approved for installation. Torque the mounting hardware to the specified torque values—do not overtighten.

5. 1999 and Later Super Duty F-250 and F-350 Trucks

Remove the bolt that secures the emergency brake cable to the outside of the frame rail. Reinstall the bolt with the nut positioned on the inside of the frame rail to prevent the bolt head from contacting and potentially damaging the air spring.

Failure to reposition this bolt in Step 5 will result in air spring rupture.

Air Spring Installation into Vehicle

1. Verify Mounting Height

The air spring must be installed with a distance of 5″ to 7″ between the upper and lower brackets. Whenever possible, position the upper bracket as high as the frame allows. Failure to achieve the correct mounting height may cause the air spring to bottom out during operation.

If the top rear mounting hole is above the frame rail, use the two lower mounting holes instead.

2. Place Air Spring Assembly

Set the air spring assembly onto the leaf spring directly above the axle.

3. Align Upper Bracket

Position the upper bracket so at least four bolt holes (two on each side) are on the flat section of the frame rail. Ensure that drilled hole edges are no closer than 3/4″ to the top or bottom radii of the frame.

4. Use Optional Spacers (If Necessary)

If needed to achieve proper height, install the optional spacers (N) beneath the lower bracket. If the stock U-bolts prevent the lower bracket from sitting flat on the leaf spring, trim the U-bolts as needed.

5. Attach Lower Bracket Without Spacer

Attach the lower bracket securely to the leaf spring using the provided U-bolts, flat washers, and lock nuts. Torque nuts to 16 lb.-ft. (22Nm).

6. Attach Lower Bracket With Spacer

Place the spacer's legs down on the leaf spring, position the lower bracket over them, and secure using U-bolts, flat washers, and lock nuts. Torque to 16 lb.-ft. (22Nm).

Use the shorter 2" U-bolts (F) when attaching to frame-contact overload springs.

7. Align Brackets Before Drilling

Before drilling, inspect the backside of the frame for brake lines, fuel lines, or electrical wiring that may need to be temporarily relocated. Ensure the upper bracket is parallel with the lower bracket, aligning the assembly vertically and horizontally.

8. Drill Initial Locator Holes

Using the upper bracket as a template, center punch and drill a 3/8" locator hole through the frame at one of the top bolt hole positions. Repeat for the opposite side.

9. Install Initial Hardware

For most vehicles, loosely install a washer-head frame bolt, oversized flat washer, and lock nut.

Special Note for Dodge Vehicles:

On some Dodge models, the top or bottom holes may fall into a horizontal frame indentation. Use the provided spacers (K) along with a washer-head frame bolt (M), oversized flat washer (L), and lock nut (G) to compensate for the indentation.

10. Drill and Secure Remaining Holes

Drill the remaining two holes and install the provided hardware. Torque all nuts to 44 lb.-ft. (60Nm).

11. Check Air Spring Alignment

Adjust the air spring as needed within the slots of the upper and lower brackets. Ensure there is at least a thumb's width of clearance between the uninflated air spring and the frame.

12. Tighten Air Spring Bolts

Using a 9/16" open-end wrench, secure the air spring by tightening the two bolts on the top and the two bolts on the bottom of the assembly.

Due to the thickness of the leaf spring stack, trim the excess length from all four U-bolt ends on each side of the vehicle to prevent interference with the upper bracket.

13. Final Inspection of Air Springs

Double-check all bolts and connectors to ensure everything is secure.

14. Repeat for other Side

Repeat the installation process for the other side of the vehicle.

15. Reinstalling the Fender Well Liner — Late-Model 4WD Dodge Only

a. Position the Fender Well Liner

If the installation was performed on a late-model 4WD Dodge truck, reinstall the inner fender well liner using the original fasteners and the provided spacer to ensure proper clearance for the air spring.

b. Install Spacer and Center Fastener

Place the spacer between the fender well liner and the fender well at the center hole location (the hole nearest the air spring). Secure it using the provided 1/4″ hex-head cap screw (O), #12 Flat washer (Q), and 1/4″ nylon lock nut (R).

- Insert the hex-head cap screw through the liner and spacer.
- Place the washer and lock nut behind the fender well.
- Tighten the hardware securely.

c. Reinstall Remaining Rivets

Carefully replace the remaining plastic rivets by pushing them through the fender well liner by hand. Ensure the rivets pass through completely.

d. Secure Rivets

From the backside, use a rubber mallet to gently tap the rivet posts back into place. This will lock the rivets securely. Repeat for all remaining rivet locations.

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.

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

Atlus Products Company provides a warranty to the original purchaser of its Load Support Products, for the periods of time listed at AtlusProducts.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 Atlus 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 Atlus Products Company's instructions, specifications or guidelines; or service, alteration, maintenance or repairs performed by anyone other than Atlus 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. Atlus 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 Atlus product to become inoperable within the warranty period, before returning any defective product, email Atlus 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 Atlus Products Company for verification. You must prove to the satisfaction of Atlus Products Company the date of original purchase of your Atlus 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 Atlus Products Company will do

If you submit a valid claim to Atlus Products Company during the warranty period, and Atlus determines that the product was defective, Atlus Products Company will, at its option, repair your Atlus product or furnish you with a new or rebuilt product. Atlus Products Company will not reimburse you for repairs or replacement parts provided by other parties. Your repaired or replacement Atlus 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 Atlus 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, Atlus 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

Atlus 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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