

INSTALLATION GUIDE



CHRYSLER LX, LD and LC PLATFORMS, 300C, DODGE CHARGER, CHALLENGER, and MAGNUM

REAR APPLICATION

Kit 76517

(includes SRT 8 models, excludes AWD models)

For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

Failure to read these instructions can result in an incorrect installation which could result in damage to the vehicle, minor to severe personal injury or death.

Protect your Air Lift Performance Purchase by Completing your Warranty Registration



Thank you for purchasing an Air Lift Performance product! Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

TABLE OF CONTENTS

P.02 Introduction

Notation Explanation

P.03 System Overview

P.04

Install the System

Important Safety Notices Section 1. Prepare the Vehicle Section 2. Stock Suspension Removal Section 3. Prepare the Air Suspension Section 4. Install the Kit Components Section 5. Route the Air Lines

P.08 Before Operating

Set the Ride Height Torque Specifications Suggested Driving Air Pressure Maximum Air Pressure Check for Binding Installation Checklist Damping Adjustment

P.09
Limited Warranty
and Return Policy

Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Chrysler LX, LD and LC Platforms, 300C, Dodge Charger, Challenger, and Magnum. Read these installation instructions to correctly and safely set up the vehicle for a #lifeonair.

Air Lift assumes that the installer has the mechanical knowledge and ability to work on vehicle suspension systems and has basic tools necessary to complete a suspension replacement project. Special tools needed to complete the installation are noted on the System Overview page.

Air Lift reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Performance at **(800) 248-0892** or visit **www.airliftperformance.com.**

An Air Lift Performance air management system is highly recommended for this product. Learn more at air-lift.co/productlines.

NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation, which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



DANGER

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



WARNING

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



CAUTION

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE VEHICLE OR MINOR PERSONAL INJURY.



NOTE

Used to help emphasize areas of procedural importance and provide helpful suggestions.

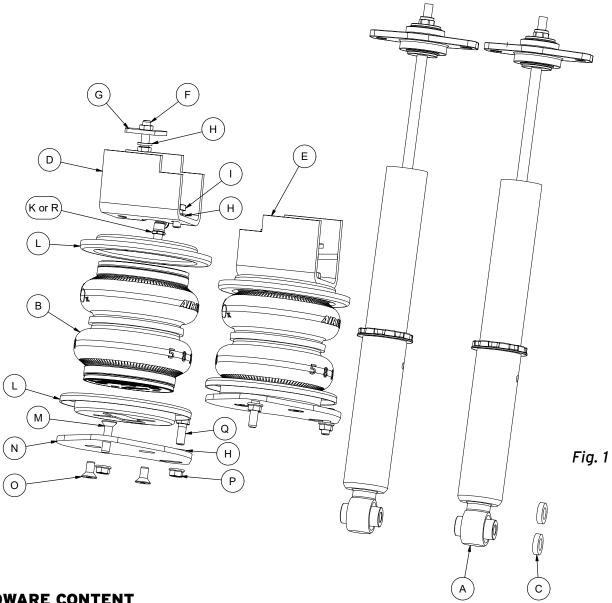


TECH TIP

Used to provide helpful tips to ease the installation process.



System Overview



HARDWARE CONTENT

Item	Part #	Description	Qty
Α	39156	SHOCK, LX, FRONT	2
В	58439 A	AIR SPRING, 2B6 REGULAR (W/O JB)	2
С	18544 A	SPACER, 1/2" ID x 1" OD x 1/4" THK	2
D	07416 A	UPPER BRACKET ASM-RIGHT REAR	1
E	07325 A	UPPER BRACKET ASM-LEFT REAR	1
F	17188	3/8-16 UNC x 1 1/4" HHCS	2
G	10814 A	CLAMP PLATE	2
Н	18427	3/8" LOCK WASHER	8
1	17203	3/8-24 x 7/8" HEX BOLT	4

Item	Part #	Description	Qty
K	21744	1/8" MNPT - 90 x 1/4" PTC FITTING	2
L	11801 C	ROLL PLATE	4
М	17206	3/8-16 x 1 1/4" FHSCS	2
N	03614 B	REAR BOTTOM BRACKET	2
0	17215	3/8-24 x 3/4" FHSCS G5	4
Р	18422	3/8" FLANGE NUT	4
Q	17107	3/8-16 x 1" HEX BOLT	2
R	21854	1/8" MNPT - 90 x 3/8" PTC FITTING	2



Missing or damaged parts? Call Air Lift customer service at (800) 248-0892 for a replacement part.

Install the System

SECTION 1.

PREPARE THE VEHICLE

- 1. Elevate the vehicle and support the vehicle with a hoist or safety stands.
- 2. Remove the rear tire and support the hub assembly (Fig. 2)

*representative image



Fig. 2

SECTION 2.

STOCK SUSPENSION REMOVAL

- 1. With the hub supported, unbolt the upper and lower shock mount bolts and remove the shock.
- Remove the rear coil spring (see vehicle manufacturers detailed process for removal).

SECTION 3.

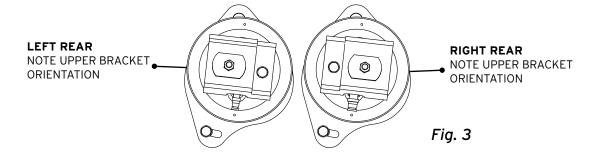
PREPARE THE AIR SUSPENSION

1. Apply thread sealant to the threads of the appropriate fitting and install into the air spring air-port 1 and 3/4 turns beyond hand-tight.



Determine where the air line will route. When routing 1/4" (.6cm) air line, the fitting can face inboard allowing the bracket to protect the connection.

- 2. Insert flat head screw (M) through the rear bottom bracket (N) prior to installing the air spring to the bracket.
- 3. Apply a roll plate (L) to the bottom side of the air spring (B) with the lower air spring bolt holes accessible. Align these holes with the bottom bracket holes (make sure the flat head screw [M] is still installed) and thread flat head screws (O) through the bottom bracket and into the air spring. Torque to 27Nm (20 lb.-ft.).
- 4. Attach the corresponding upper bracket (left [E] and right [D] specific) and roll plate to the air spring using the supplied fine thread hex bolts (I) and lock washers (H). Please note the upper bracket orientation as shown in (Fig. 3). Torque bolts to 27Nm (20 lb.-ft.).





SECTION 4.

INSTALL THE KIT COMPONENTS



PLEASE READ - IMPORTANT INSTALLATION INFORMATION



FOR COIL TO AIR UPGRADE KIT INSTALLATIONS ONLY: Please refer to the included Coil to Air Upgrade Kit installation guide (MN-2000) for details on how to disassemble the coilovers and assemble the air springs.

Also refer to your control system installation guide to ensure the installation of your air suspension system is complete.

1. Insert the clamp plate (G) into upper spring perch with the nut facing upward (Fig. 4).

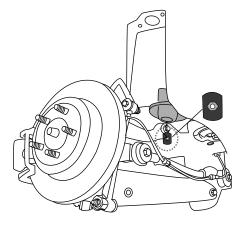


Fig. 4

- 2. Collapse the assembly and slide into the stock spring location. The air fitting faces outboard of the vehicle.
- 3. Insert and snug nut and bolts into existing holes required for lower spring link (Fig. 5).

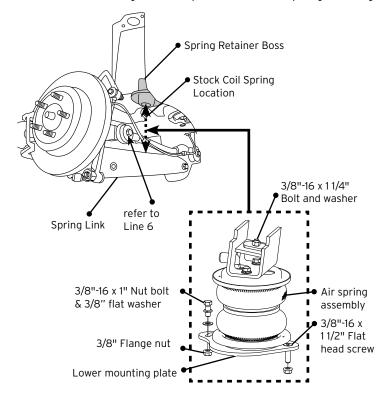


Fig. 5



- 4. Raise the hub so that the upper bracket assembly locates around the upper spring perch.
- 5. Apply a lock washer (H) to bolt (F) and insert through the slot within the upper bracket and thread into the clamp plate within the spring perch. Tighten only finger-tight at this time.
- 6. Unthread the rear lateral link bolt from the knuckle. Place the spacer (C) in-between the lateral link and knuckle and reinstall the lateral link bolt (Fig. 6). Do not torque at this time.

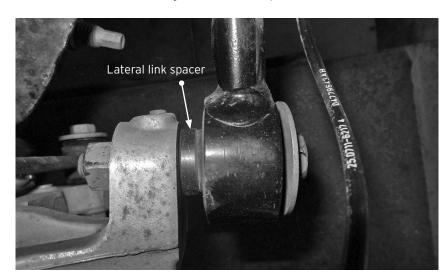
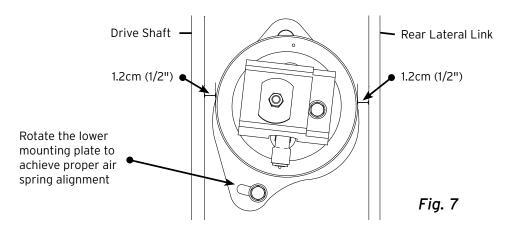


Fig. 6

7. Rotate the air spring assembly and lower mounting plate as necessary to achieve proper air spring alignment.



There should be 1.2cm (1/2") clearance between the completed assembly and the drive shaft and rear lateral link. Cycle suspension through its travel and check clearances throughout. Adjust accordingly.



- 8. Deflate the assembly, making adjustments as needed (Fig. 7). Torque the upper and lower air spring-to-chassis/control arm assembly bolts to 27Nm (20 lb.-ft.).
- 9. Place the new shock (A) into the shock tower and attach the upper and lower mounting bolts. Torque the upper bolts to 52Nm (38 lb.-ft.).



SECTION 5.

ROUTE THE AIR LINES



AFTER INSTALLATION, ENSURE ALL ORIGINAL EQUIPMENT VEHICLE SAFETY FEATURES ARE PROPERLY CALIBRATED BY A QUALIFIED TECHNICIAN. CHANGING VEHICLE HEIGHT MAY AFFECT FUNCTIONING OF SAFETY SENSORS AND CAMERAS.

- 1. Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the air line that is clear of all suspension components and axle.
- 2. Routing should allow for the suspension to extend and steer without kinking, pulling the line tight or rubbing on other components. Following the brake line routing is often a good place to start. Check clearances to all other components.



PLEASE READ - IMPORTANT INSTALLATION INFORMATION

Please refer to your control system installation guide for more details on air line routing and to ensure the installation of your air suspension system is complete.

Before Operating

SET THE RIDE HEIGHT

1. Refer to the User Guide supplied with this kit to set up the suspension.

Torque Specifications					
Location	Nm	lbft.			
Camber Link Crossmember Bolt	85	63			
Camber Link Knuckle Bolt	98	72			
Compression Link Crossmember Bolt	85	63			
Compression Link Knuckle Bolt	81	60			
Shock Absorber Mounting Bolts (Upper)	52	38			
Shock Absorber Mounting Bolt Nut (Lower)	72	53			
Spring Link Crossmember Bolt	108	80			
Spring Link Knuckle Nut	138	102			
Stabilizer Link Nuts	61	45			
Tension Link Crossmember Bolt	85	63			
Tension Link Knuckle Bolt	98	72			
Lateral Link Crossmember Nut	108	80			
Lateral Link Knuckle Bolt	95	70			

2. Upon successful completion of the installation, follow these pressure requirements for the air springs.







FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND WILL VOID THE WARRANTY.



CHECK FOR BINDING



CAUTION

MAKE SURE THE FRONT WHEELS ARE STRAIGHT WHEN DEFLATING AND REINFLATING AIR SPRINGS.

- 1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
- 2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks.

INSTALLATION CHECKLIST

- □ **Clearance** Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and make sure there is at least 13mm (1/2") clearance from anything that might rub against the air spring. This should be checked with the air spring fully inflated and fully deflated.
- □ **Leak** Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks. All leaks must be eliminated before the vehicle is road-tested.
- □ **Heat** Be sure there is sufficient clearance from heat sources, at least 152mm (6") from air springs and air lines. If a heat shield was included in the kit, install it. If there is no heat shield, but one is required, call Air Lift customer service at **(800) 248-0892**.
- ☐ **Fastener** Recheck all bolts for proper torque.
- □ **Road** Inflate the air springs to recommended driving pressures (see previous page). Drive the vehicle 16km (10 miles) and recheck for clearance, loose fasteners, and air leaks.
- □ **Operating instructions** If professionally installed, the installer should review the operating instructions with the owner. Be sure to provide the owner with all paperwork that came with the kit.

DAMPING ADJUSTMENT

- 1. The dampers in this kit have 32 settings, or "clicks," of adjustable compression and rebound damping characteristics. Damping is changed through the damper rod using the supplied adjuster (example shown here) or a 3mm hex key (not included).
- 2. Turn the adjuster clockwise (H), and the damping settings are hardened, reducing oscillations and body motion. Turn the adjuster counterclockwise (S), and the damping is softened.
- 3. Each damper will need to be set after installation and your initial drive, as they are not pre-set. It may take multiple adjustments to dial in your ideal ride. A good starting point is in the middle at 16 clicks from full soft, then drive the vehicle and make adjustments either softer or stiffer. For more information, refer to the user guide.



Limited Warranty and Return Policy

Air Lift Company provides a limited warranty to the original purchaser of Air Lift Performance Air Suspension kits 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 Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy.

* Full Limited Warranty and Return Policy are available at www.airliftperformance.com/warranty and are subject to change.

WARRANTY REGISTRATION & CLAIMS

- To register your warranty, please visit https://www.airliftperformance.com/support/warranty-registration/
- To submit a warranty claim, please visit https://www.airliftperformance.com/support/submit-warranty-claim/

Need Help?

The Air Lift Company customer service department is open from 8 a.m. to 8 p.m. ET Monday through Friday. Call (800) 248-0892 or +1 (517) 322-2144 for calls from outside the U.S. and Canada.





Connect by searching for **Air Lift Performance** #LifeonAir





2727 Snow Road Lansing, MI 48917 or P.O. Box 80167 Lansing, MI 48908-0167 Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 www.airliftperformance.com

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at (800) 248-0892 or visit airliftperformance.com.