



## INSTALLATION GUIDE



### Kit 78674

Mercedes C117, CLA/GLA,  
Infiniti QX30

#### REAR APPLICATION

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.

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# Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Mercedes C117, CLA/GLA, Infiniti QX30. 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](http://www.airliftperformance.com)**.

An Air Lift Performance air management system is highly recommended for this product. Learn more at **[air-lift.co/productlines](http://air-lift.co/productlines)**.

## NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is 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.*

# System Overview



THIS KIT  
REQUIRES THE  
REMOVAL OF  
FACTORY

TORQUE-TO-YIELD  
BOLTS. THESE BOLTS  
ARE DESIGNED TO BE  
REPLACED AFTER THEY  
HAVE BEEN LOOSENED.  
TORQUE-TO-YIELD BOLTS  
ARE INDICATED IN THE  
INSTRUCTIONS AND IN  
THE TORQUE  
SPECIFICATION CHART.

**Rear Shock  
Part #26882 (x2)**

**M44 Spanner Wrench**

**Air Spring  
Part #58554 (x2)**

**Roll Plate  
Part #11312 (x2)**

**\*1/4" MNPT x 3/8" PTC Elbow Fitting  
Part #21851 (x2)**

**- OR -**

**1/4" MNPT x 1/4" PTC Elbow Fitting  
Part #21779 (x2)**

## TORQUE-TO-YIELD BOLTS\*\*

### Description

Lower control arm to wheel bearing housing  
Lower control arm to axle carrier (cam bolt)

\*1/4" MNPT x 3/8" PTC Elbow Fittings (21851) are NOT  
included in this kit, but are available as a special order.

\*\* These bolts are not included with this kit



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

# Installing the System

## IMPORTANT SAFETY NOTICES



DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



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.

## SECTION 1.

### PREPARE THE VEHICLE



RAISE THE REAR OF THE VEHICLE WITH A JACK AT THE APPROVED LIFTING POINTS AND USE SAFETY STANDS TO SUPPORT THE VEHICLE.

1. Gain access to the rear upper shock mounts by removing the storage compartment trim and side panels.





2. Unthread the shock upper mount nuts.



3. Elevate and support the vehicle with a hoist or safety stands.
4. Remove the rear wheel.



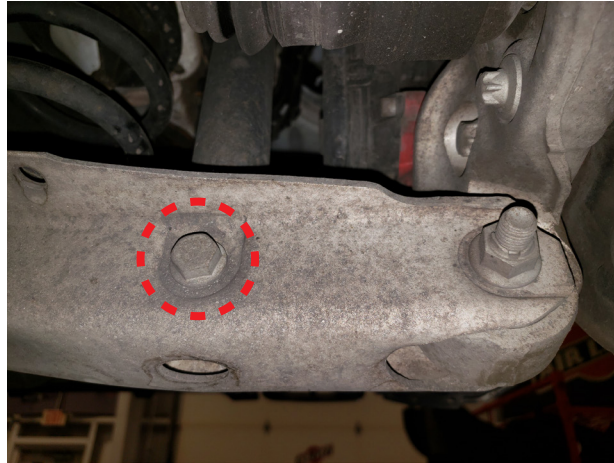
## **SECTION 2.**

## **REMOVE THE STOCK SUSPENSION**

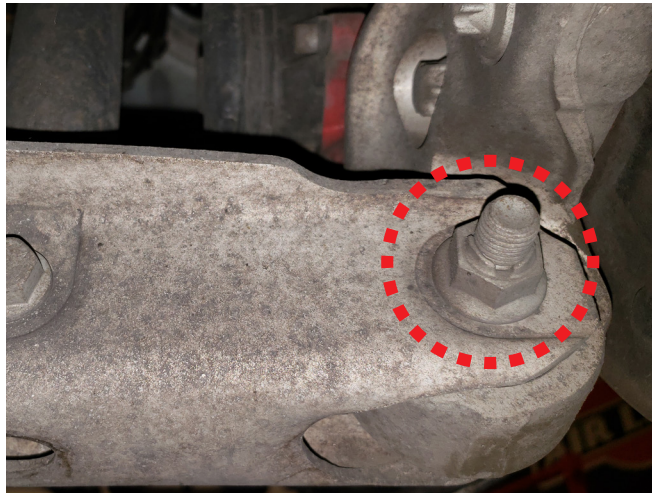
1. Remove the fender liner.



2. Unthread the lower shock bolt and remove the shock.



3. Support the lower control arm and remove the outer bolt from the wheel bearing housing. Lower the control arm and remove the spring and rubber isolators.





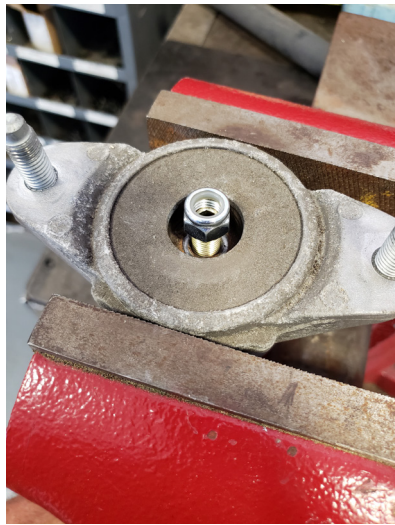
4. Unfasten the upper mount from the shock rod. Retain the mount.



## SECTION 3.

## INSTALL THE KIT COMPONENTS

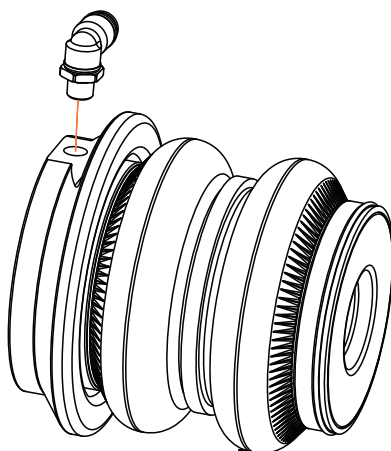
1. Remove the rod nut from the new shock assembly while retaining the rod spacer. Apply the upper mount to the rod, over the spacer. Reapply the rod nut and torque to 25Nm (18 lb.-ft.).
  - a. When assembling the rod to the mount, orient the adjuster so the letters face outboard when installed on the vehicle.



2. Attach the shock upper mount to the chassis. Torque nuts to 50Nm (37 lb.-ft.).



3. Tighten the appropriate fitting to the air spring 1 3/4 turns beyond hand-tight. Make certain the fitting flats are parallel to the top side of the air spring as shown.



4. With the fitting on the top side, apply the air spring over the lower spring land and position the fitting in a desired location, free from air line routing obstructions.



5. Attach the lower control arm to the wheel bearing housing. Torque at ride height 50Nm + 90 degrees (37 lb.-ft. + 90 degrees).





6. Attach the shock to the lower control arm. Torque at ride height 50Nm + 90 degrees (37 lb.-ft. + 90 degrees).



7. Reinstall the fender liner.

- a. Adjusting the damping involves removing the fender liner or cutting access through the fender liner. Take note of where the adjuster is in relation to the liner and cut an "X" in the liner. This will allow access without removing the liner while preventing debris from collecting behind it.



8. Reinstall wheel and torque to 130Nm (96 lb.-ft.).
9. Reattach interior storage compartment trim.



## **SECTION 4.**     **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.

## **Finished Installation Photo**



## **Congratulations!**

You are now the proud owner of an industry leading Air Lift Performance air suspension system. Enjoy!



# Before Operating

## SET THE RIDE HEIGHT

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

Torque Specifications			
Location	TTY*	Nm	Lb.-ft.
Shock rod nut		25	18
Upper shock mount nuts		50	37
Lower shock mount bolt		50	37
Lower control arm to wheel bearing housing	✓	50 + 90 degrees	37 + 90 degrees
Lower control arm to axle carrier (cam bolt)	✓	50 + 90 degrees	37 + 90 degrees
Wheel bolts		130	96
Damper locking collar		45 degrees beyond hand-tight	
Air line and fitting		1 3/4 turns beyond hand-tight with thread sealant	

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



**Suggested Driving Air Pressure**



**Maximum Air Pressure**



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



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

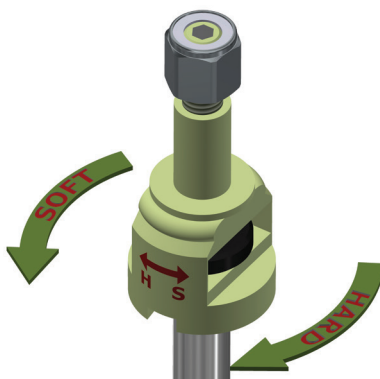
1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and 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 30 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 in this kit is preset to "-17 clicks." This means that the damper is adjusted 17 clicks away from full stiff, which starts at 0. Counting up from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2015 Mercedes AMG CLA45.



For more information, refer to the User Guide.

# Limited Warranty and Return Policy

Air Lift Company provides a 1-year limited warranty to the original purchaser of Air Lift Performance damper kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on vehicles 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 that is available online at [www.airliftperformance.com/warranty](http://www.airliftperformance.com/warranty).

For additional warranty information contact Air Lift Company customer service.

*Thank you for purchasing Air Lift Performance products!*

## 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 (517) 322-2144 for calls from outside the U.S. and Canada.



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