

**AIR LIFT**  
**PERFORMANCE**

## **Kit 78580**

Mercedes W205 AWD

***Front Application***



## **INSTALLATION GUIDE**

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.*



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## A. Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Mercedes W205 AWD. 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 *Installation Diagram* 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.

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### NOTE

*Indicates a procedure, practice or hint which is important to highlight.*

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## B. Important Safety Notices



**WARNING**

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



**CAUTION**

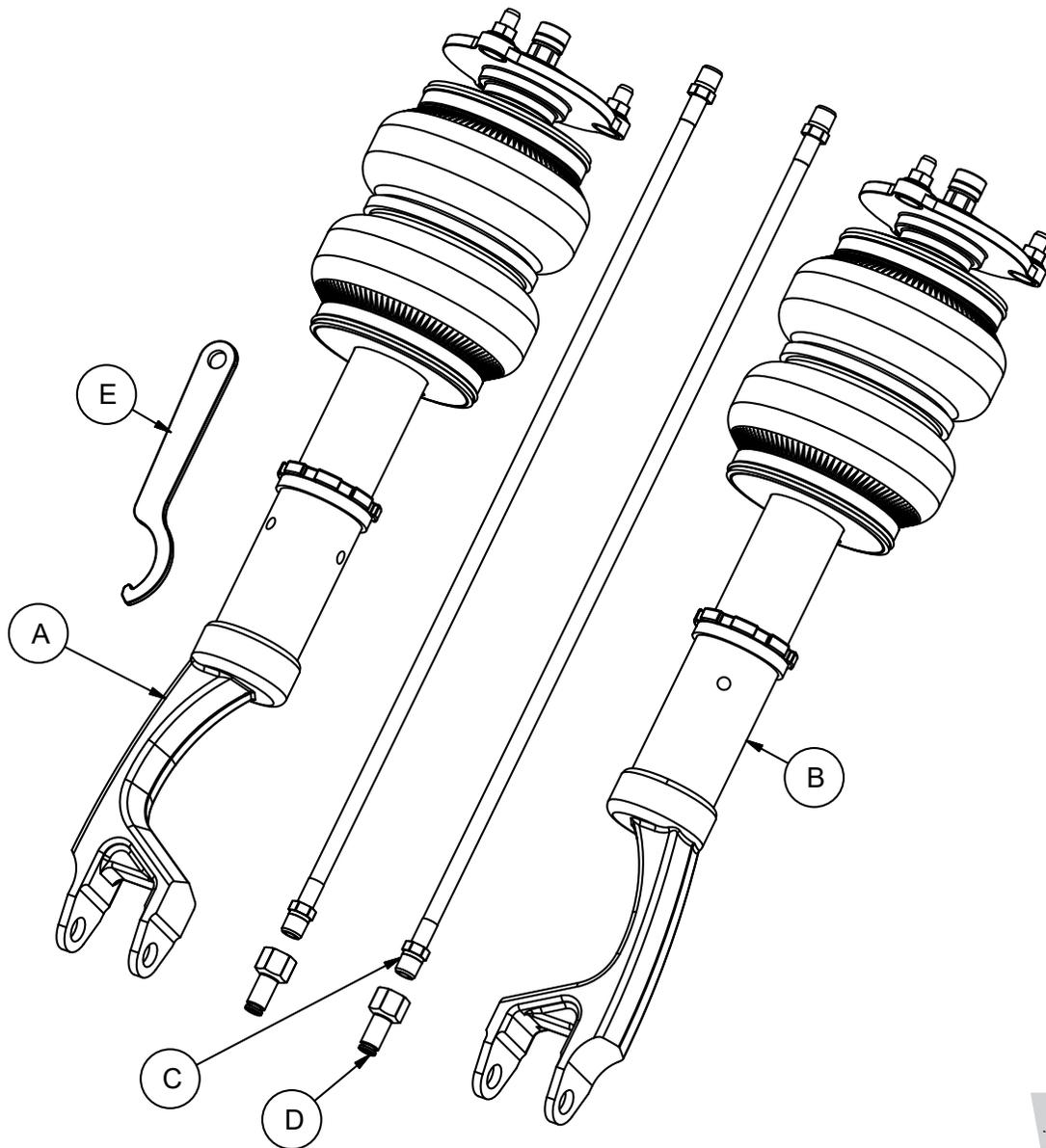
DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



**WARNING**

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.

# C. Installation Diagram



*fig. C.1*

## HARDWARE LIST

Item	Part #	Description .....	Qty
A	35461	Shock, left front .....	1
B	35460	Shock, right front.....	1
C	20997	Leader line, 1/4" .....	2
D	21810	1/4" FNPT x 1/4" PTC fitting .....	2
E	11289	M50 Spanner .....	1



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

## D. Installing the Air Suspension

### NOTE

See "Important Safety Notices" on page 2.

### CAUTION

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

### PREPARING THE VEHICLE

1. Elevate and support the vehicle with a hoist or jack stands.
2. Remove the front wheel (Figs. D.1 & D.2).



*fig. D.1*



*fig. D.2*

### REMOVING THE FRONT DAMPER

1. Unclip the brake line bracket from the damper (Figs. D.3 & D.4).



*fig. D.3*



*fig. D.4*

2. Disconnect the stabilizer bar linkage from the steering knuckle (Figs. D.5 & D.6).

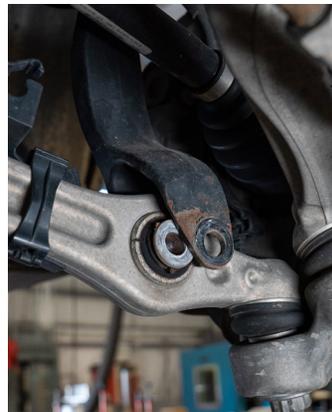


*fig. D.5*



*fig. D.6*

3. Unbolt the damper assembly from the spring control arm (Fig. D7).

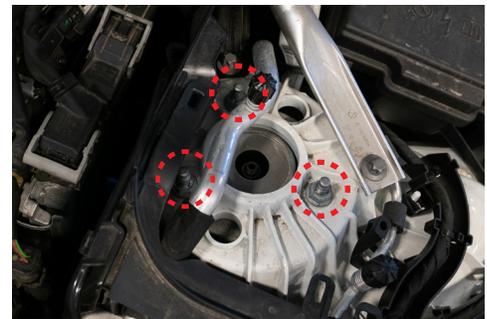


*fig. D.7*

4. Within the engine compartment, lift the cowl cover and remove the three upper mount nuts (Figs. D.8 & D.9).



*fig. D.8*



*fig. D.9*

5. Remove the damper assembly from the vehicle (Fig. D.10).



*fig. D.10*

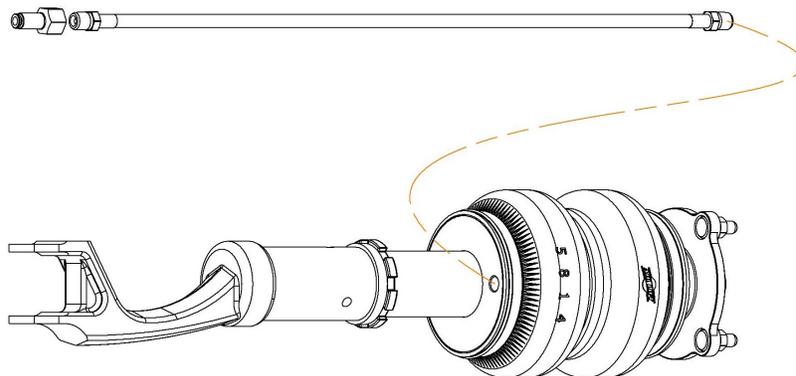
## INSTALLING THE AIR SUSPENSION

1. The damper assembly height is based on the C Class. If installing on a GLC application, loosen the locking collar and adjust the damper length until the bottom of the damper can be seen in the adjustment window located on the side of the lower mount (Fig. D.11). Torque the locking collar 45 degrees beyond hand-tight.



*fig. D.11*

2. Begin applying thread sealant to the threads of the leader line. Tighten the fitting to the leader line (1 3/4 turns beyond hand-tight) (Fig. D.12). Tighten the leader line into the air spring 1 3/4 turns beyond hand-tight.



*fig. D.12*

3. Attach the upper mount to the chassis (Fig. D.13). Torque nuts to 55Nm (41 lb.-ft.).



*fig. D.13*

4. Attach the lower mount to the control arm (Fig. D.14). Torque shock mount bolt at desired ride height with load to 130Nm (96 lb.-ft.).



*fig. D.14*

5. Reattach the stabilizer end link to the steering knuckle (Fig. D.15). Torque the end link nut to 80Nm (59 lb.-ft.).



*fig. D.15*

6. Attach the brake line bracket using the supplied tie straps (Figs. D.16-D.18).



*fig. D.16*



*fig. D.17*



*fig. D.18*

7. Reinstall wheels and torque to 150Nm (111 lb.-ft.).

**FINISHED INSTALLATION PHOTO**



*fig. D.19*

## ROUTING THE AIR LINES



**WARNING**

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 and steering components.
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.

## E. Before Operating

### SETTING THE RIDE HEIGHT

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

Torque Specifications		
Location	Nm	lb.-ft.
Damper to spring control arm	130	96
Upper mount to chassis	55	41
Stabilizer linkage to steering knuckle	80	59
Wheel bolts	150	111
Damper locking collar	45 degrees beyond hand-tight	
Air line and fitting	1 3/4 turns beyond hand-tight with thread sealant	

*Table 1*

Suggested Driving Air Pressure	Maximum Air Pressure
<b>70 PSI (4.8BAR)</b>	<b>125 PSI (8.6BAR)</b>
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND <b>WILL VOID THE WARRANTY.</b>	

*Table 2*

### 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 125 PSI [8.6BAR]) 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 75-90 PSI (5.2-6.2BAR) and check all connections for leaks.

## INSTALLATION CHECKLIST

- Clearance** — Inflate the air springs to 75-90 PSI (5.2-6.2BAR) and make sure there is at least 1/2" (13mm) 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 75-90 PSI (5.2-6.2BAR) 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 6" (152mm) 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 (Table 2). Drive the vehicle 10 miles (16km) 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 (Figs. E.1 & E.2) 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 “-16 clicks.” This means that the damper is adjusted 16 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 2018 Mercedes GLC300.

For more information, refer to the User Guide.



fig. E.1



fig. E.2

# Notes

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## 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.

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## 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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