



INSTALLATION GUIDE



BMW E30, 3-SERIES COMPACT (E35/6), AND Z3 (E36/7/8)

REAR APPLICATION

Kit 76530/76536

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.



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your warranty.**

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Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the BMW E30, 3-Series Compact (E35/6), and Z3 (E36/7/8). 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

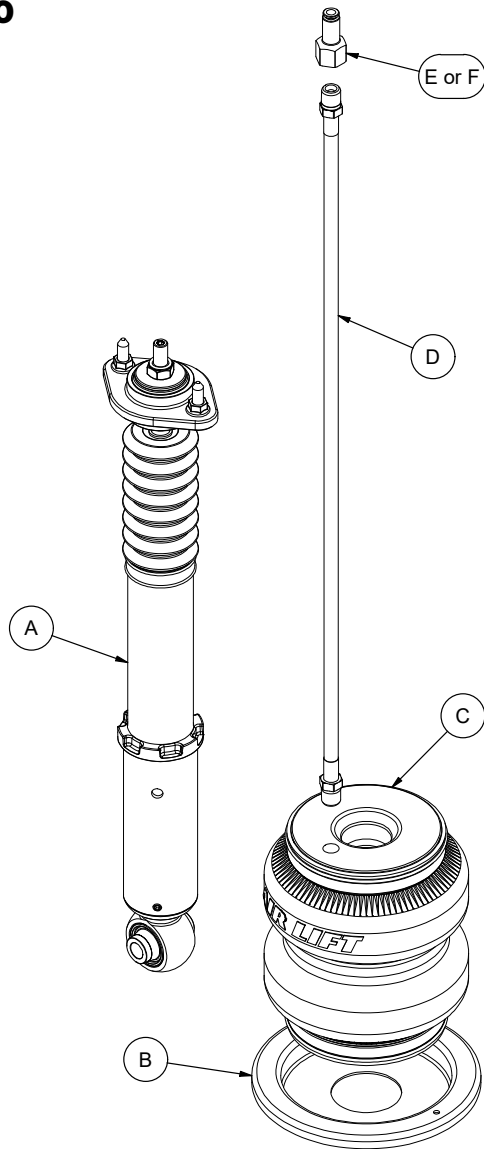
Used to help emphasize areas of procedural importance and provide helpful suggestions.



TECH TIP

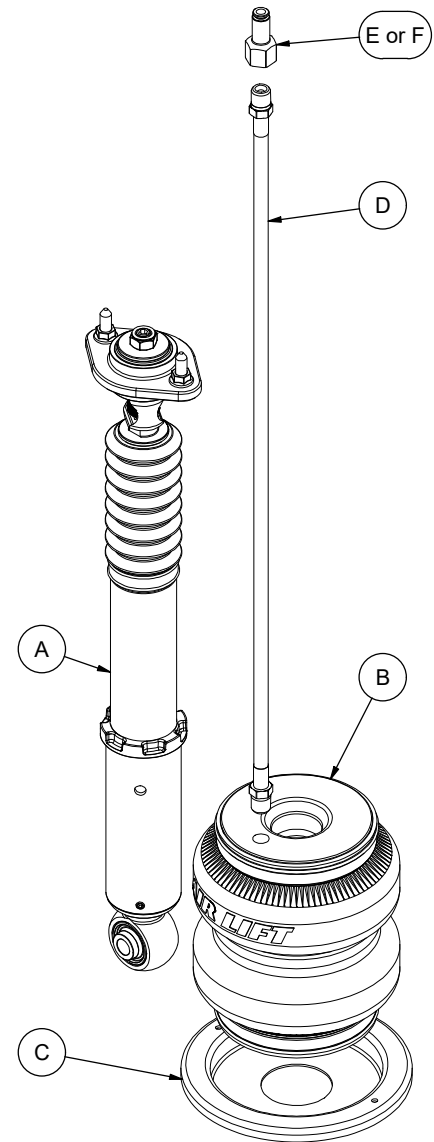
Used to provide helpful tips to ease the installation process.

System Overview

76530


HARDWARE CONTENT

Item	Part #	Description	Qty
A	39185	SHOCK, BMW E30, REAR	2
B	11802 C	ROLL PLATE	2
C	58536	AIR SPRING, 2B6REG RECESSED MNT	2
D	20997 C	LEADER LINE, 1/4" ID	2
E	21810	1/4" FNPT X 1/4" PTC AIR FITTING, DOT	2
F	21987	1/4" FNPT X 3/8" PTC AIR FITTING, DOT	2

76536


Item	Part #	Description	Qty
A	39183	SHOCK, BMW Z3, REAR	2
B	58536	AIR SPRING, 2B6REG RECESSED MNT	2
C	11802 C	ROLL PLATE	2
D	20997 C	LEADER LINE, 1/4" ID	2
E	21810	1/4" FNPT X 1/4" PTC AIR FITTING, DOT	2
F	21987	1/4" FNPT X 3/8" PTC AIR FITTING, DOT	2



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

Install the System



NOTES

See important safety notices on page 2.

SECTION 1. PREPARE THE VEHICLE

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



Fig. 2

SECTION 2. STOCK SUSPENSION REMOVAL



CAUTION

COIL SPRING UNDER LOAD.

1. With the hub supported, unbolt the shock eye from the hub assembly (Fig. 3). Slowly lower the hub to release the load on the coil spring (Fig. 4). Remove the coil spring and spring pads from the vehicle (Fig. 5).



CAUTION

IF THE LOWER CONTROL ARM IS ALLOWED TO HANG FREE, THE AXLE SHAFT CONSTANT VELOCITY JOINTS WILL BE DAMAGED.



Fig. 3



Fig. 4



Fig. 5

2. Unbolt the shock upper mount and remove the shock assembly from the vehicle (Fig. 6). If rear shocks are not being replaced, move to next step.



Fig. 6

SECTION 3. PREPARING THE VEHICLE CHASSIS

1. Place the supplied template over the upper coil spring bump (Fig. 7). The small circle centerline will designate the location where you want the air line to exit through the upper spring seat. Position as desired, center punch and drill through the upper spring seat. A .67" diameter (17mm) hole will be required to pass the air line through (Fig. 8).



Fig. 7



Fig. 8

2. Measure from the flats of the upper and lower spring seats 24mm to the end of the spring seat bump and mark this position (Figs. 9, 10 & 11). This should be near the end of the bump. Trim the bump material away at this line. When finished, the spring bump is to be no longer than 24mm (Figs. 12, 13 & 14).


Fig. 9

Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

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.



NOTES

All dampers come pre-set to even lengths, and locking collars are pre-tightened. It is always recommended to double-check that the dampers are the same length side to side, and the locking collars are tight.

Please refer to the User Guide included with the kit for any suspension setup adjustments.

1. Thread air line into the air spring 1 3/4 turns beyond hand-tight.
2. Place the roll plate over the lower spring bump (Fig. 15).



Fig. 15

3. Route the air line through the previously cut hole (Fig. 16). Install the leader line in the air spring port 1 3/4 turns past hand-tight. Nest the air spring around the upper and lower spring seats (Fig. 17).



Fig. 16



Fig. 17

4. Install the shock assembly (Fig. 18). Torque the upper mount bolts to 22Nm (16 lb.-ft.). Install, but do not torque the lower shock eye bolt at this time (Figs. 19 & 20).

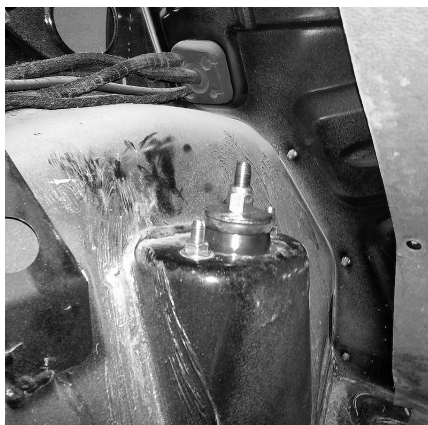


Fig. 18



Fig. 19



Fig. 20

5. Attach the desired fitting (E or F) onto the leader hose 1 3/4 turns beyond hand-tight (Fig. 21).

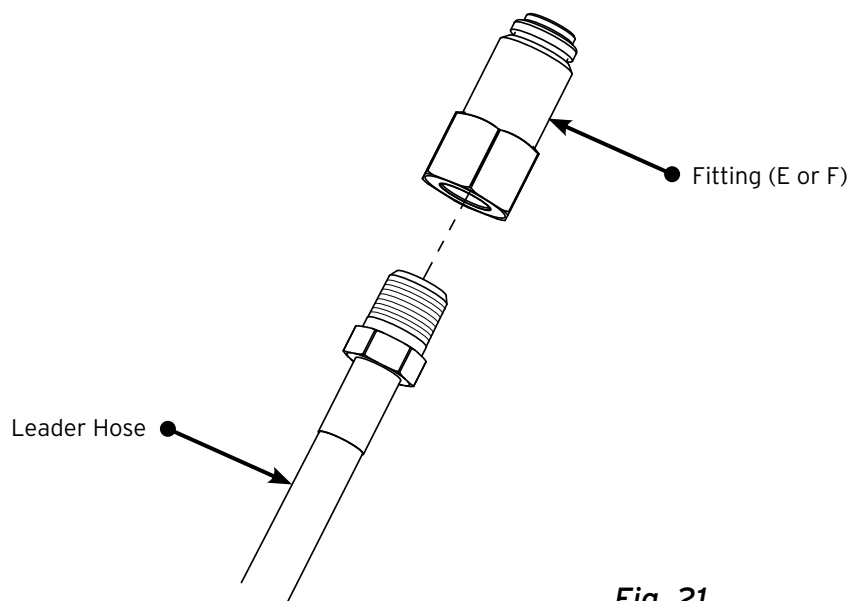


Fig. 21

SECTION 5. ROUTE 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 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	lb-ft
Shock eye bolt	72-87	52-63
Shock upper mount nuts	22-24	16-17
Wheels	120 +/-10	89 +/-1
Air line and fitting threads	1 and 3/4 turns beyond hand tight	

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



Suggested Driving Air Pressure



Maximum Air Pressure



CAUTION

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.

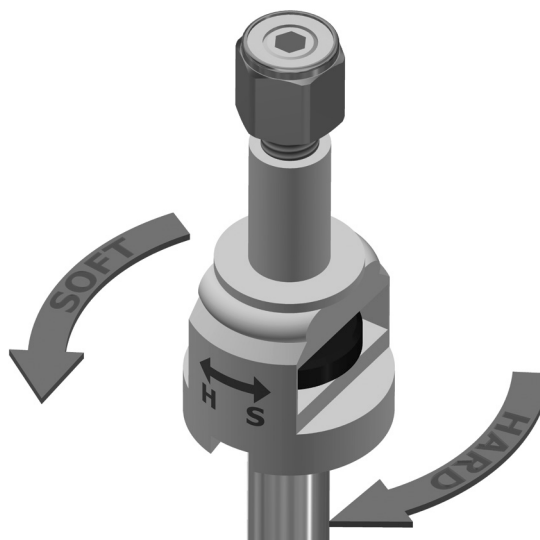
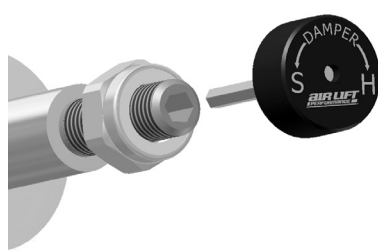
INSTALLATION CHECKLIST

- ☐ **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.



Drilling Template Verification



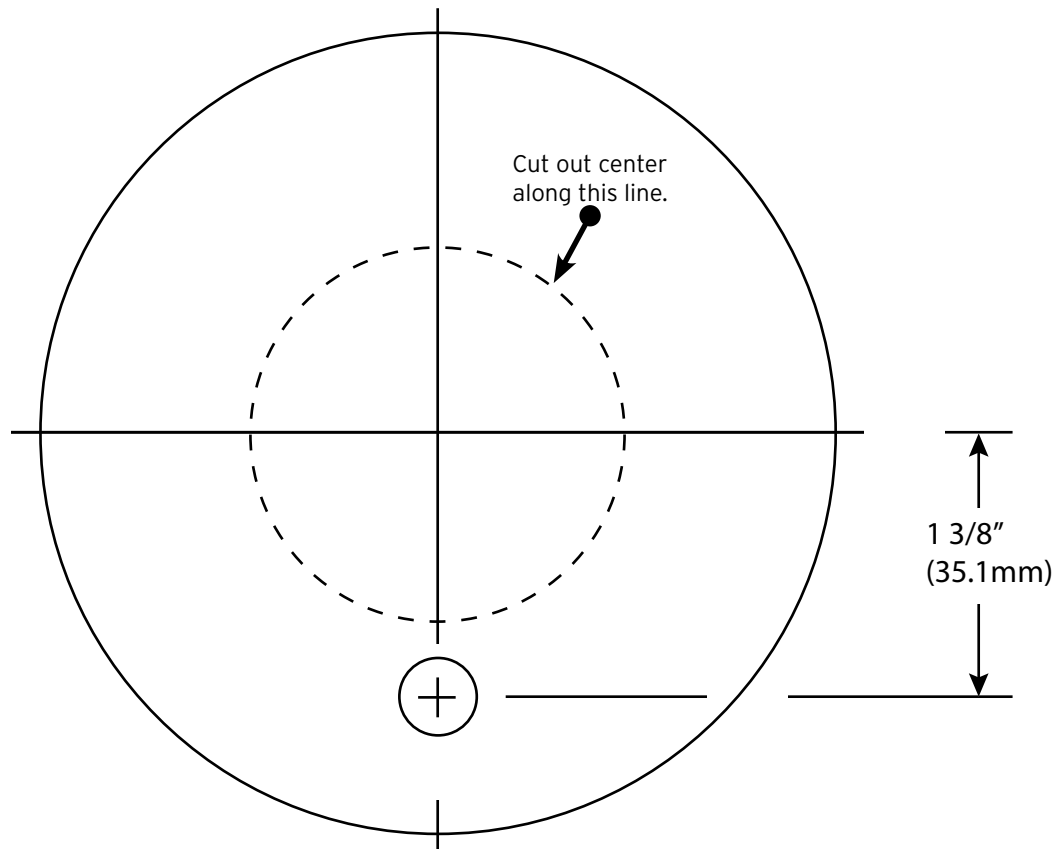
CAUTION

IMPORTANT: PRINT THIS MANUAL AT 100% SCALE. THIS MANUAL CONTAINS A DRILLING TEMPLATE, WHICH WOULD BE RENDERED INCORRECT IN DIMENSION IF PRINTED WITH ANY SCALING. USING AN INCORRECT TEMPLATE TO DRILL HOLES MAY CAUSE DAMAGE TO THE VEHICLE!

PLEASE REFER TO THE ONE-INCH SCALE (SHOWN BELOW) AND USE A MEASURING TOOL TO CONFIRM THAT THE PRINTED SCALE MEASURES 1" OR 1CM TO VERIFY THAT THE TEMPLATE HAS BEEN PRINTED AT 100% SCALE. IF IT IS PRINTED AT ANY SCALE OTHER THAN 100%, YOU COULD END UP DRILLING IN THE WRONG LOCATIONS ON THE VEHICLE.



TEMPLATE



Thank you for purchasing Air Lift Performance products!

Need Help?

Contact Air Lift Company Customer Service at
(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

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