



Kits 75673 & 78615

BMW E30 and
E36/5/7/8 Compact
Rear Application



INSTALLATION GUIDE

**IMPORTANT: KIT 78615
DOES NOT COME WITH
REAR SHOCKS.**

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.*



TABLE OF CONTENTS

Introduction	2
Notation Explanation	2
Installation Diagram	3
Hardware List	3
Installing the Air Suspension	4
Preparing the Vehicle	4
Removing the Rear Suspension	4
Preparing the Vehicle Chassis	5
Air Suspension Installation	7
Routing the Air Lines	9
Before Operating	9
Setting the Ride Height	9
Torque Specifications	9
Suggested Driving Pressure	9
Maximum Air Pressure	9
Damping Adjustment	10
Installation Checklist	10
Drilling Template Verification	11
Template	12



Introduction

The purpose of this publication is to assist with the installation and maintenance of this BMW E30 Performance kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information includes a hardware list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

Air Lift Performance 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 our website at www.airliftperformance.com.

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 MACHINE OR MINOR PERSONAL INJURY.

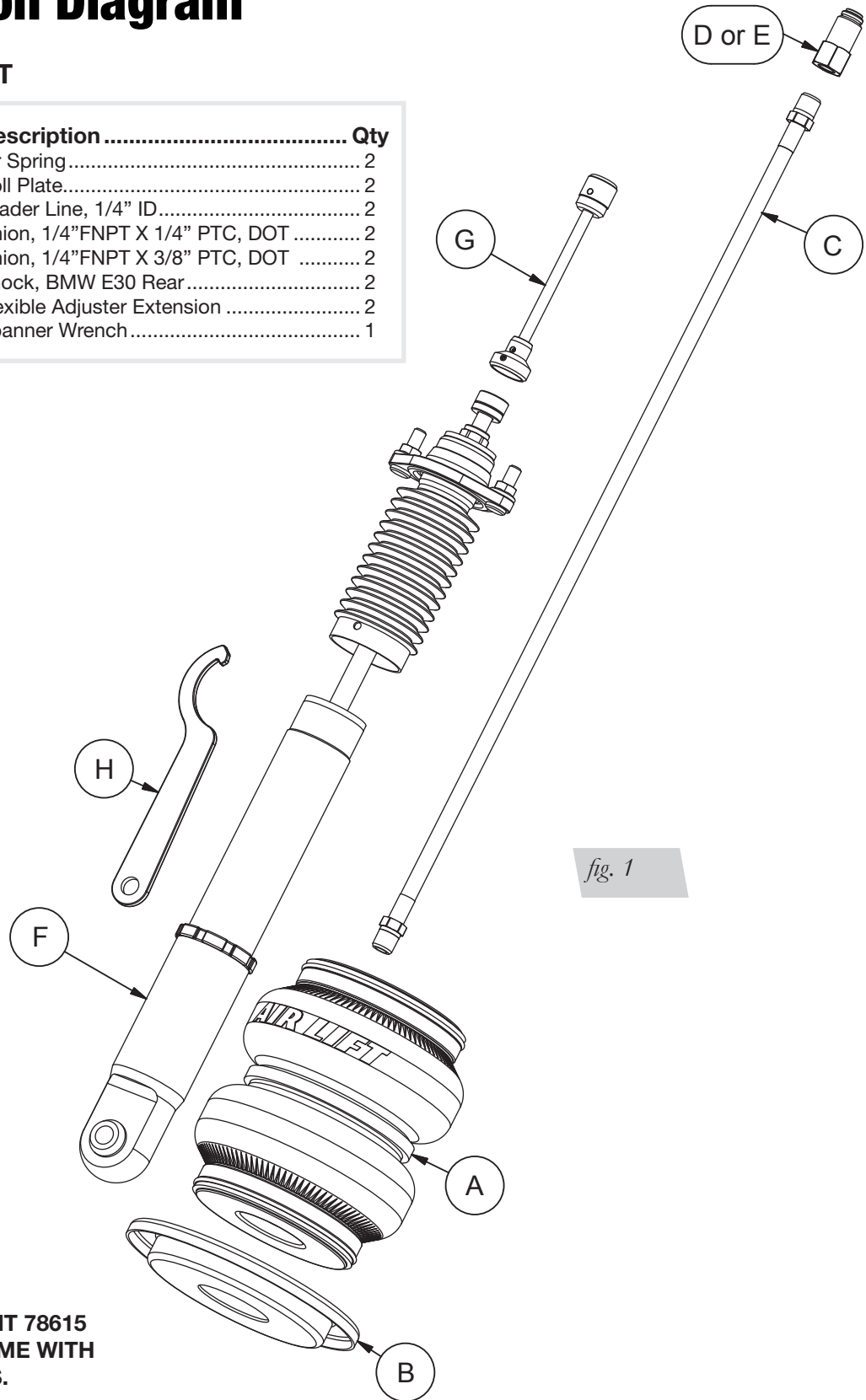
NOTE

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

Installation Diagram

HARDWARE LIST

Item	Part #	Description	Qty
A	58536	Air Spring	2
B	11802	Roll Plate.....	2
C	20997	Leader Line, 1/4" ID.....	2
D	21810	Union, 1/4" FNPT X 1/4" PTC, DOT	2
E	21987	Union, 1/4" FNPT X 3/8" PTC, DOT	2
F	26720	Shock, BMW E30 Rear	2
G		Flexible Adjuster Extension	2
H		Spanner Wrench	1



**IMPORTANT: KIT 78615
DOES NOT COME WITH
REAR SHOCKS.**



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

Installing the Air Suspension

PREPARING 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

REMOVING THE REAR SUSPENSION

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

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).

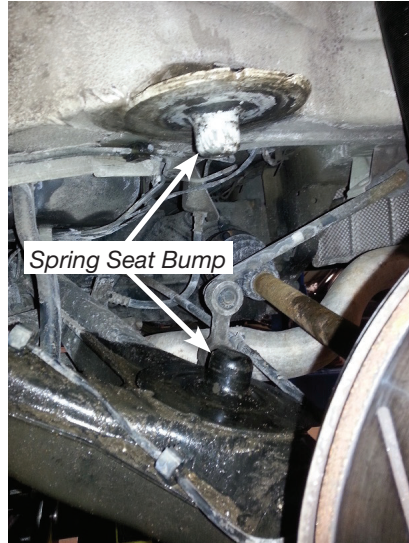


fig. 9



fig. 10



fig. 11



fig. 12



fig. 13



fig. 14

AIR SUSPENSION INSTALLATION

1. Apply thread sealant to the threads of the air line and thread 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 (fig. 19).



fig. 18



fig. 19



fig. 20

5. Apply thread sealant to the threads of the leader line and thread the desired fitting (D or E) onto the hose 1 3/4 turns beyond hand tight (fig. 21).

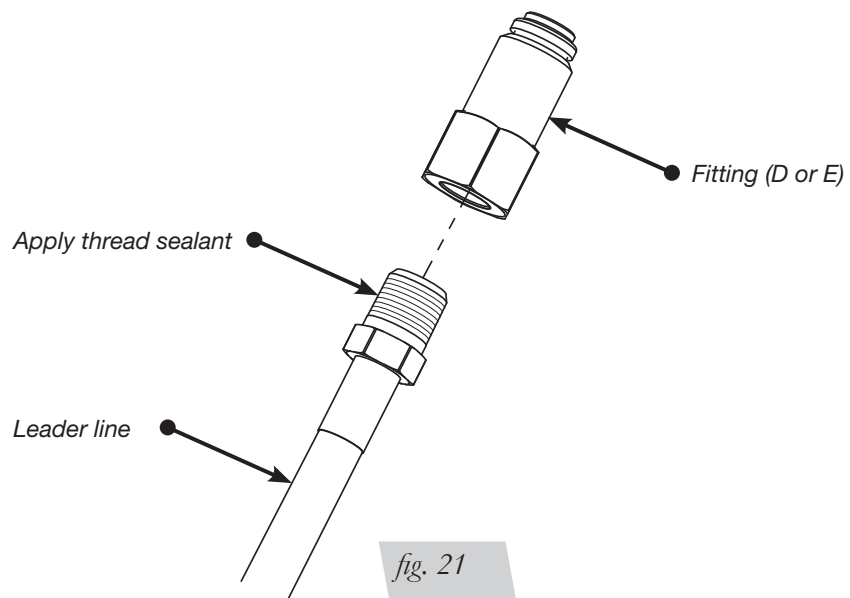


fig. 21

ROUTING THE AIR LINES

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 also allow for the suspension to extend without kinking or 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.



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.

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
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	

Table 1

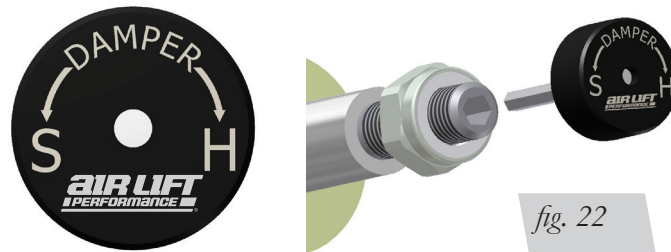
Suggested Driving Air Pressure	Maximum Air Pressure
35-50 PSI (2.4-3.4 BAR)	125 PSI (8.6BAR)
<p>FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND WILL VOID THE WARRANTY.</p>	

Table 2

DAMPING ADJUSTMENT

1. The struts in this kit have 30 settings, or “clicks,” of adjustable compression and rebound damping characteristics. Damping is changed through the strut rod using the supplied adjuster (Fig. 22) or a 3mm hex key (not included).
2. Turn the adjuster clockwise and the damping settings are hardened, reducing oscillations and body motion. Turn the adjuster counterclockwise and the damping is softened.
3. Each shock in this kit is preset to “-16 clicks.” This means that the shock 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 1986 BMW 325ES.

For more information, refer to the User Guide.



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 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.

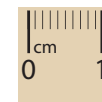
Drilling Template Verification

CAUTION

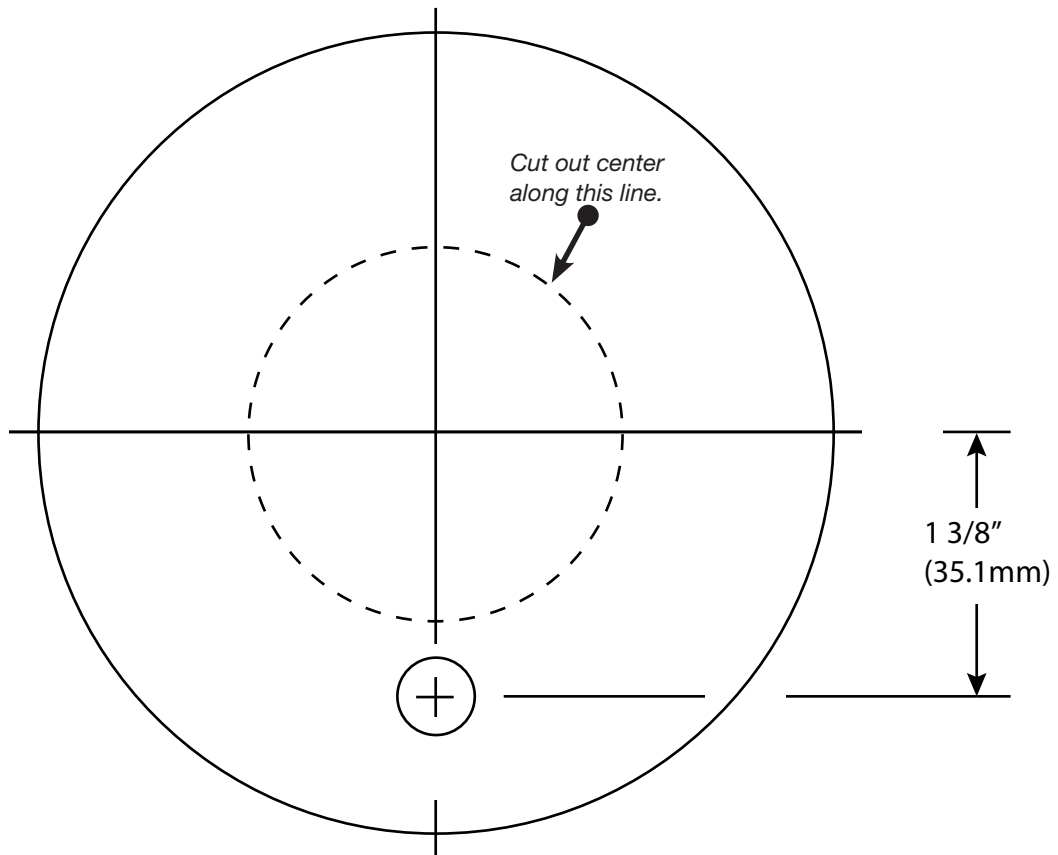
DRILLING TEMPLATE VERIFICATION

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 (FIG. G.X) 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.

*fig. 23*

Template



Need Help?

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, our local number is (517) 322-2144.



Thank you for purchasing Air Lift Performance products!



Air Lift Performance • 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

Printed in the USA
JJC-0419

California: ⚠️WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov