

**AIR LIFT**  
**PERFORMANCE**

**Kits 75622/78638**  
**Mazda3**  
**Volvo C30**  
*Rear Application*  
*(With and Without Shocks)*



**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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# Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high performance air suspension made for the Mazda3 and Volvo C30. 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 the 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**.

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 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.*

# 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/SOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



# Installation Diagram

## HARDWARE LIST

Item	Part #	Description .....	Qty
A	07038	Upper Spring Seat .....	2
B	58531	Air Spring, 2B6 REG (Recess Mount) .....	2
C	11115	Control Arm (C1 Rear).....	2
D	13979	Bushing Spacer .....	4
E	13982	Bushing Spacer .....	4
F	17101	3/8"-16 X 3/4" Hex Bolt .....	4
G	18427	3/8" Split Lock Washer .....	4
H	21779	1/4" MNPT X 1/4" PTC Elbow "DOT" .....	2
I	21851	1/4" MNPT X 3/8" PTC 90 degree "DOT" ....	2
J	26949	Mazda3 Rear Shock .....	2
K		Spanner Wrench .....	1

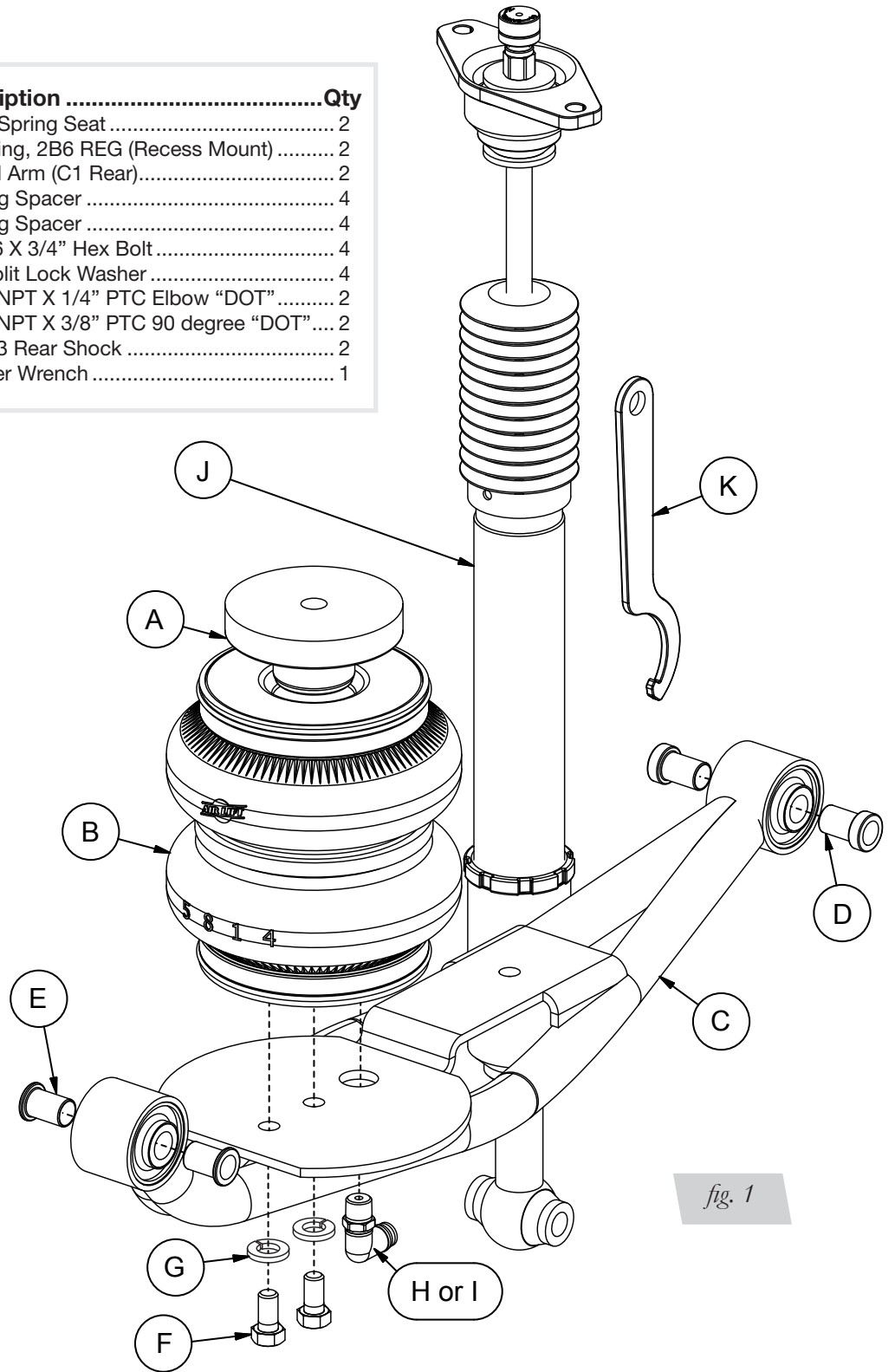


fig. 1

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

# Installing the Air Suspension

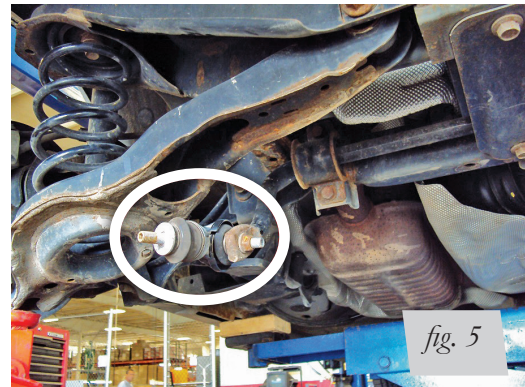
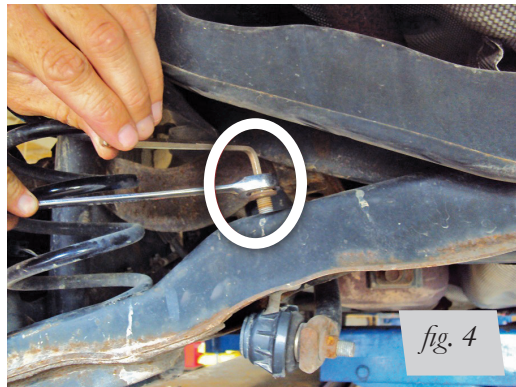
## PREPARING THE VEHICLE

1. Support the vehicle with safety stands or a hoist at approved lifting points.
2. Remove the rear wheels (Fig. 2). Support the hub assembly before beginning work (Fig. 3).



## REMOVAL OF STOCK SUSPENSION

1. Disconnect the stabilizer bar end link from the lower control arm (Fig. 4). You may also remove the end links from the stabilizer bar for easier installation covered later in this installation guide (Fig. 5).



**CAUTION**

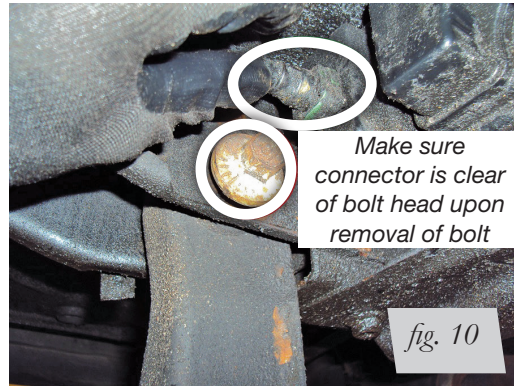
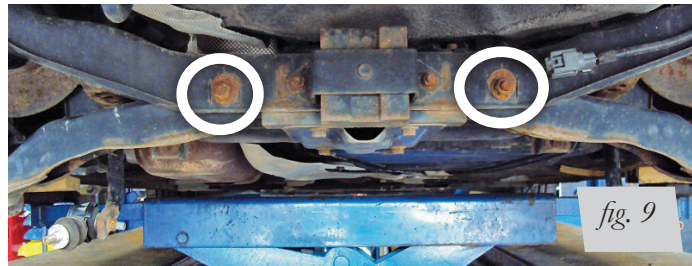
THE FOLLOWING STEPS COVER HOW TO REMOVE THE COIL SPRING WITHOUT A SPRING COMPRESSOR. CARE MUST BE TAKEN TO ENSURE THE SAFETY OF YOURSELF AND OTHERS WHEN REMOVING THE COIL SPRINGS.

2. Unbolt the outer lower control arm from the wheel bearing housing (Fig. 6). Carefully lower the control arm until coil spring tension is released (Fig. 7). It may be necessary to pull the control arm farther down to unseat the coil spring from the upper spring perch (Fig. 8). Remove the coil spring and rubber isolators.

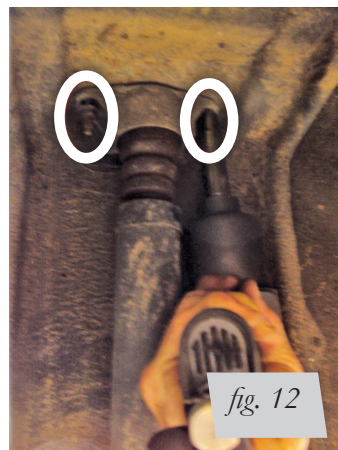




3. Remove the inner control arm cam bolts and remove the lower control arms (Fig. 9). There is a connector on one side that will need some coaxing to clear the cam bolt upon removal (Figs. 10 & 11).



4. If retaining the factory shocks, continue to “Installing the Kit Components.” Unbolt the upper and lower shock mount bolts and remove the shock from the vehicle (Figs. 12 & 13).





## INSTALLING THE KIT COMPONENTS

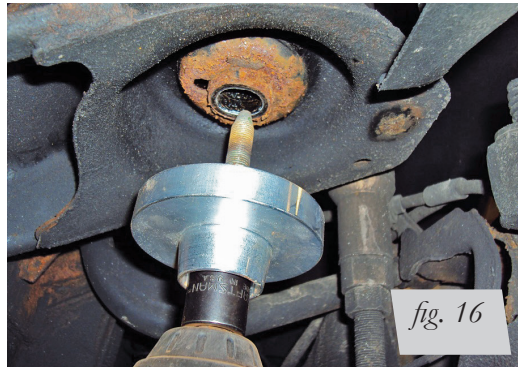
1. Remove the subframe bolt from the upper coil spring perch (Fig. 14). Place the bolt and washer through the supplied upper air spring mount and bolt into place (Figs. 15-17). Torque to 115Nm (85 lb.-ft.).



*fig. 14*



*fig. 15*



*fig. 16*



*fig. 17*

2. Cut off the zip tie from the end farthest from the large round spring seat (end with thick bushing spacers) and install into the cross member at the inner control arm pivot point. Reinstall the cam bolts. Do not torque at this time.
3. Install the stabilizer bar end link onto the newly supplied control arm (Figs. 18-21). Torque to 115Nm (85 lb.-ft.).



*fig. 18*



*fig. 19*



*fig. 20*



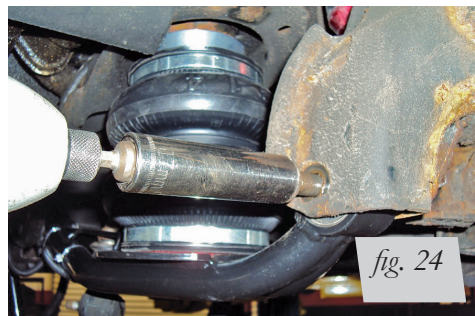
*fig. 21*



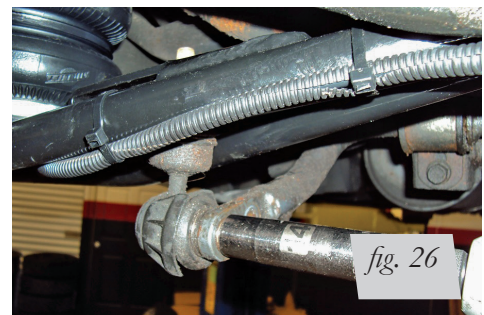
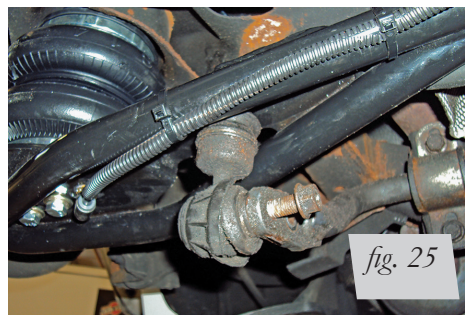
4. Attach the air spring to the control arm using the supplied washers and bolts (Fig. 22). Torque to 27Nm (20 lb.-ft.). Once the air spring is attached to the control arm (Fig. 23), apply thread sealant to the fitting threads and thread into the air spring 1 3/4 turns beyond hand tight.



5. Cut off the zip tie from the other end and attach the control arm to the wheel bearing housing (Fig. 24). Do not torque at this time.



6. Reattach the stabilizer end link to the stabilizer bar (Figs. 25 & 26). Torque nuts to 115Nm (85 lb.-ft.).



- If retaining the factory shocks, continue to "Routing the Air Lines." Install the new shock (Figs. 27 & 28). Torque the lower shock mount bolt to 102Nm (76 lb.-ft.). Torque the upper shock mount bolts to 29Nm (21 lb.-ft.). At this time, make sure the air spring is seated against the new upper spring perch as shown in Figure 24.



## 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.

- 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.
- 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.

## Before Operating

Read the User Guide that came with this kit to set up the suspension.

Torque Specifications		
Location	Nm	lb.-ft.
Fitting to air spring	1 3/4 turns beyond hand tight	
Upper shock mount to chassis	29	21
Lower shock mount bolt	102	76
Stabilizer end link nuts	115	85
Wheels	118	88
Air spring bolt to control arm	27	20
Control arm cam bolt	100	73
Control arm outer bolt	102	75

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure
<b>2.4-3.1BAR (35-45 PSI)</b>	<b>8.6BAR (125 PSI)</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

## 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.

## 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. 29 & 30) 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 "-20 clicks." This means that the damper is adjusted 20 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 2007 Mazda3 GT hatchback with stock suspension.



fig. 29



fig. 30

## 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.

## Need Help?

Contact Air Lift Company customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



CONNECT BY SEARCHING FOR **AIR LIFT PERFORMANCE** #LIFEONAIR



*Thank you for purchasing Air Lift Performance products!*



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Printed in the USA  
JJC-0319

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