

## Kit 75576

Volkswagen MKV & MKVI Platform

### **Front Application**

(for vehicles with 55mm lower strut diameter)



### **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 Volkswagen MKV &MKVI. 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.



INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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**

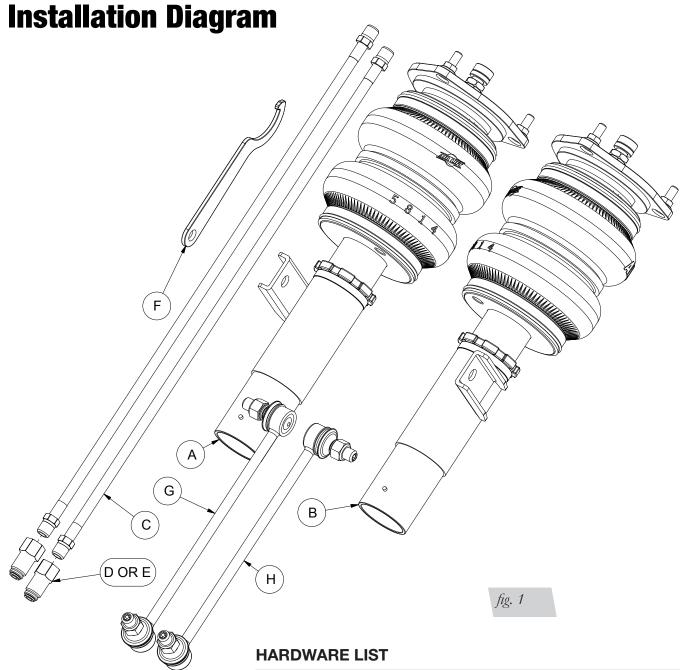


DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



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





#### **TOOLS LIST**

#### **Description**

Jack Safet

Safety stands or hoist Tape or thread sealant

Torque wrench

Metric wrenches

Standard wrenches VW spreader 3424

Wire

Item	Part #	Description	Qty
Α	35234	Strut assembly, MKV/VI front (55mm) R	
В	35235	Strut assembly, MKV/VI front (55mm) L	1
С	20997	Leader line, 1/4" ID	2
D*	21987	Union, 1/4"FNPT X 3/8" PTC, DOT	2
Ε	21810	Union, 1/4"FNPT X 1/4" PTC, DOT	2
F		Collar wrench	1
G		End link - 260mm RIGHT	1
Н		End link - 260mm LEFT	1

 $<sup>^{\</sup>star}$  1/4" FNPT x 3/8" PTC fittings are NOT included in this kit, but are available as a special order.



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

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### **Installing the Air Suspension**



THIS APPLICATION IS DESIGNED FOR PREVIOUSLY MODIFIED VEHICLES WHERE THE FRAME HAS BEEN NOTCHED FOR AXLE CLEARANCE. AIR LIFT COMPANY DOES NOT RECOMMEND FRAME MODIFICATION AND ANY MODIFICATIONS PREVIOUSLY DONE ARE AT THE OWNER'S RISK. AIR LIFT COMPANY IS NOT LIABLE FOR VEHICLE OR PERSONAL DAMAGE DUE TO MODIFICATIONS PERFORMED.

#### PREPARING THE VEHICLE

- 1. Elevate the vehicle and support the body with a hoist or safety stands.
- 2. Remove the front wheels.

#### NOTE

If the vehicle is equipped with Automatic Headlight Vertical Aim Control, detach the unit from the lower control arm (Fig. 2 - part 1) to prevent overextension.

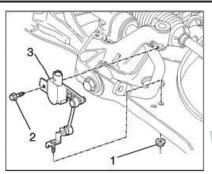


fig. 2

#### REMOVAL OF STOCK SUSPENSION

- 1. Unbolt the sway bar from the tab (Fig. 3). For sway bar removal instructions see factory repair manual.
- 2. Unthread and remove the axle bolt from the hub assembly (Fig. 3a).





3. Remove the three lower nuts from the lower ball joint and control arm (Fig. 4). Detach the ball joint and hub assembly from the control arm.



fig. 4



4. Pull drive axle out of the hub assembly and secure the axle to the body with wire.



TO PREVENT DAMAGE TO THE INNER AXLE JOINT, DO NOT ALLOW THE AXLE TO HANG FREE.

- 5. Reattach the lower ball joint to the lower control arm.
- 6. Support the hub assembly.
- 7. Remove the bolt at the back of the hub assembly to the strut.
- 8. Spread the hub assembly slot and push down on the hub to release the strut from its lower mount (Fig. 5). Volkswagen specific tool is spreader 3424.



fig. 5

- 9. Pull weather-stripping away from the plenum chamber cover within the engine bay and pull the cover up. Removing the wiper arms and completely removing the cover will gain more access.
- 10. Remove the three bolts from the upper strut mount (Fig. 6) and remove the strut assembly from the vehicle.



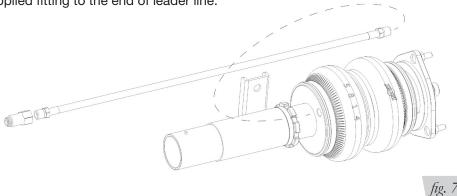
fig. 6

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#### INSTALLING THE KIT COMPONENTS

1. Prior to installing the strut, attach the leader line provided to the threaded port at the bottom of the air spring (Fig. 7). Seal with tape or thread sealant. Seal and thread supplied fitting to the end of leader line.



- 2. Insert strut into the hub assembly. Reinstall the lower mounting bolt and torque to 70 Nm (52 lb.-ft.).
- 3. Lift assembly into strut pocket and align upper mounting bolts with three holes. Using the supplied nuts and washers, tighten the upper mount to 37Nm (27 lb.-ft.).
- 4. Remove the lower ball joint bolts again and separate the control arm from the joint. Reinsert the axle.
- 5. Reinstall the ball joint nuts and torque to 60Nm (44 lb.-ft.).
- 6. Torque the hex head drive axle to 200Nm (148 lb.-ft.). If the bolt is a 12 point, torque to 70Nm (52 lb.-ft.).
- 7. Reinstall the plenum chamber cover and wiper arms if previously removed.
- 8. At this position, torque the lower clevis bolt, upper and lower control arm bolts to manufacturer's specifications (Table 1).
- 9. Reinstall wheels; retake the Max Compression and Extension measurements from the fender to lower wheel lip. Recalculate the ride height at 50% stroke and set the vehicle to that height. Enjoy the new look and handling! Please make sure to get an alignment at the preferred drive height.

#### **ROUTING THE AIR LINES**

- Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the leader line that is clear of all suspension and steering components.
- 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.



### **Before Operating**

#### **SETTING THE RIDE HEIGHT**

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

Torque Specifications				
Location	Nm	Lbft.		
Strut Lower Mount Pinch Bolt	70	52		
Strut Upper Mount Nuts	37	27		
Ball Joint Nuts	60	44		
Hex Head Drive Axle Bolt	200	148		
12 Point Drive Axle Bolt	70	52		

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure		
45 PSI (3.1BAR)	125 PSI (8.6BAR)		
FAILURE TO MAINTAIN AREQUATE MINIMUM PRESCURE (OR RECOURS			

FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND WILL VOID THE WARRANTY.

Table 2

#### **CHECK FOR BINDING**

- 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.



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



#### **INSTALLATION CHECKLIST**

<b>Clearance</b> — 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.
<b>Leak</b> — 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.
<b>Heat</b> — 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 <b>(800) 248-0892</b> .
Fastener — Recheck all bolts for proper torque.
${\bf Road-Inflate}$ the air springs to recommended driving pressures (Table 2). Drive the vehicle 10 miles (16km) and recheck for clearance, loose fasteners and air leaks.
<b>Operating instructions</b> — If professionally installed, the installer should review the operating instructions with the owner. Be sure to provide the owner with all

#### DAMPING ADJUSTMENT

paperwork that came with the kit.

- 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. 8 & 9) 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 "-15 clicks." This means that the damper is adjusted 15 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 2008 Volkswagen Jetta.

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.

For additional warranty information contact Air Lift Company customer service.

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### **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.







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