

Air Lift™
PERFORMANCE

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.

PERFORMANCE SUSPENSION PARTS

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Volkswagen MKV & MKVI 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, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

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

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the vehicle is designed to carry. Payload is GVWR minus the Base Curb Weight.



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.

Installation Diagram

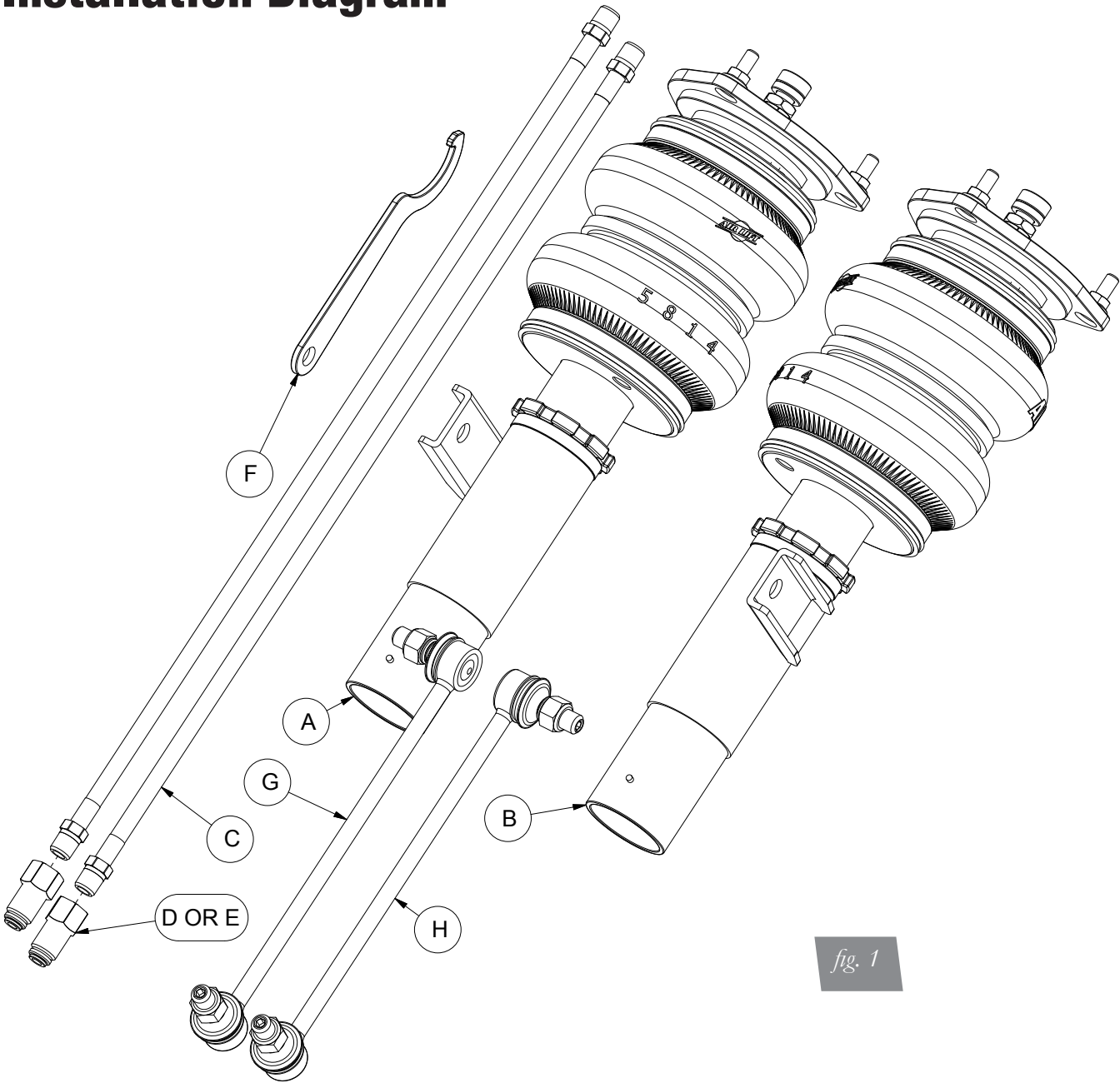


fig. 1

TOOLS LIST

Description

- Jack
- Jack stands or hoist
- Torque wrench
- Metric Wrenches
- Standard Wrenches
- VW Spreader 3424

HARDWARE LIST

Item	Part #	Description	Qty
A	35234	Strut assembly, MKV/VI Front (55mm) R.....	1
B	35235	Strut assembly, MKV/VI Front (55mm) L	1
C	20997	Leader Hose, 1/4" ID.....	2
D	21987	Union, 1/4"FNPT X 3/8" PTC, DOT.....	2
E	21810	Union, 1/4"FNPT X 1/4" PTC, DOT.....	2
F		Collar Wrench	1
G		End Link - 260mm RIGHT.....	1
H		End Link - 260mm LEFT	1

Installing the Air Suspension

DANGER

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 jack 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.

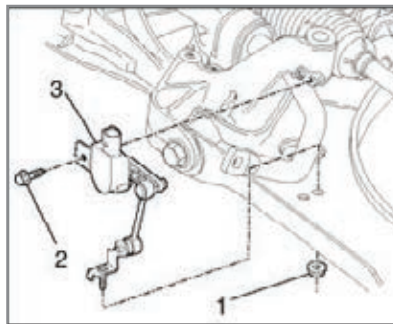


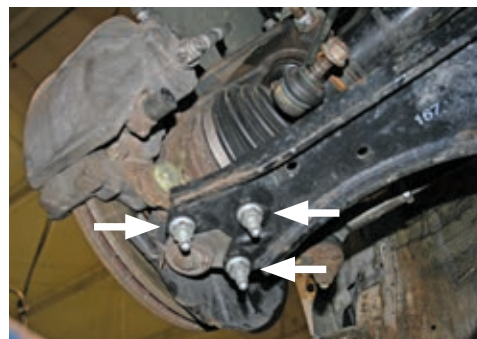
fig. 2

REMOVING THE STRUT

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.





CAUTION

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

INSTALLING THE NEW STRUT ASSEMBLY

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

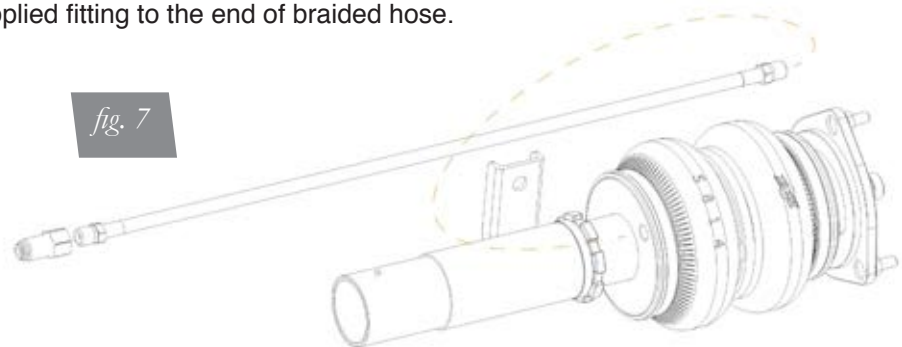


fig. 7

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 37 Nm (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 60 Nm (44 lb-ft).
6. Torque the hex head drive axle to 200 NM (148 lb-ft). If the bolt is a 12 point, torque to 70 NM (52 lb-ft).
7. Reinstall the plenum chamber cover and wiper arms if previously removed.

Torque Specifications		
Location	Nm	lb-ft
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
Wheels	120	89

Table 1

8. With the suspension fully compressed, take a measurement from the fender to some reference point, typically the center of the axle. Record this as Max Compression (MC). Cycle the suspension to Max Extension (ME) and record the measurement from the same reference points. Take the difference between the two numbers and divide by two. Add that value to the Max Compression number and then set the suspension to that point (fig. 8). This position gives 50% stroke in either direction and is a great starting point for ride height. At this position torque the lower clevis bolt and lower control arm bolts to manufacturer's specifications (Table 1).

Formula for calculating ride height:

Step 1:

$$\frac{ME - MC}{X}$$

Step 2:

$$\frac{X}{2} = Y$$

Step 3:

$$\frac{Y + MC}{Z}$$

Answer:

Z = DESIGN HEIGHT

fig. 8

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.

ALIGNING THE VEHICLE

1. Using the control system, set the vehicle height to the new custom ride height.
2. If the custom ride height is lower than stock, we recommend loosening all pivot points (bolts, nuts) on any control arm, strut arm or radius rod that contains bushings. Once they have been loosened, re-torque to stock specifications.

NOTE

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help unload the bushing to make it last longer at its new position based on the custom ride height.

DAMPING ADJUSTMENT

The shocks in this kit have 30 settings or “clicks” of adjustable compression and rebound damping characteristics. Damping is changed through the adjuster at the top of the shock rod. Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened. Each rear shock is preset to “-15 clicks”. This means that the shock is adjusted 15 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track/setting of damping. This setting was developed on a 2008 Volkswagen Jetta and may need to be adjusted to different vehicles and driving characteristics.



fig. 9



fig. 10

ADJUSTING EXTENDED OR DROP HEIGHT USING LOWER MOUNT

Your struts have been pre-set at the factory to provide maximum drop height while maintaining adequate tire clearance to the air spring. If you wish to gain more extended height (lift), which is the same as reducing drop height, or want to lower the chassis further and there is still adjustment available at the lower mount, please use the following procedure:

1. Support the vehicle with jack stands or a hoist at approved lifting points.
2. Remove the wheel.
3. Using the supplied spanner wrench, loosen the lower locking collar. (fig. 11)

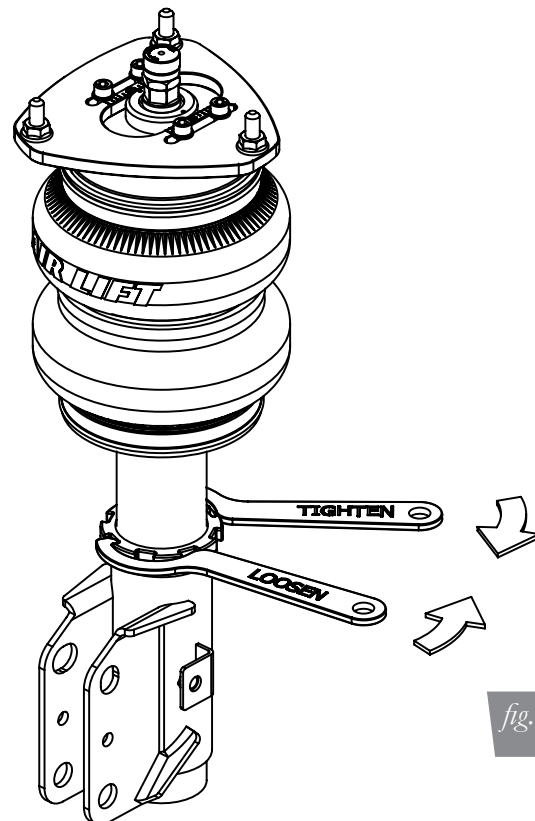


fig. 11

4. Deflate the air spring to 0 PSI on the corner you are adjusting.
5. Disconnect lower mount from suspension
6. Spin the lower mount to the desired location.

NOTE

Not all models will have further drop height available.

7. Re-install lower mount to suspension and torque fasteners.
8. Tighten the lower locking collar to the lower mount using significant force.

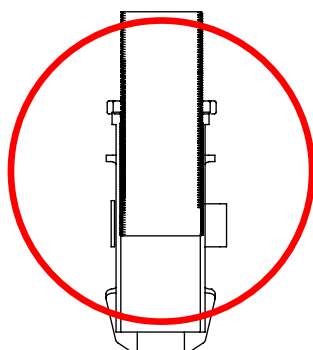
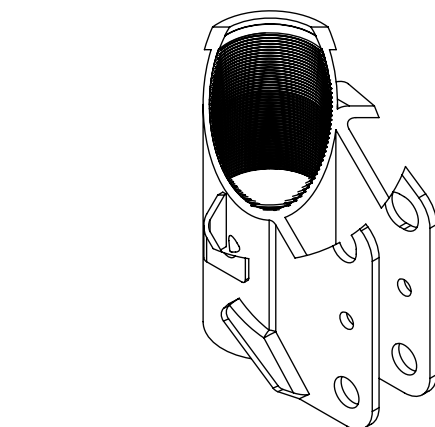
CAUTION

WHEN ADJUSTING HEIGHT UPWARDS, MAKE SURE THAT THE STRUT BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT. (FIG. 12) WHEN ADJUSTING DOWNWARDS, MAKE SURE THERE IS ADEQUATE AIR SPRING CLEARANCE TO THE TIRE/WHEEL ASSEMBLY. CLEARANCE MUST BE CHECKED WITH SYSTEM FULLY DEFLATED AS WELL AS FULLY INFLATED TO ENSURE THAT NO RUBBING OCCURS. FAILURE TO MAINTAIN ADEQUATE CLEARANCE CAN RESULT IN AIR SPRING FAILURE AND WILL NOT BE COVERED UNDER WARRANTY.

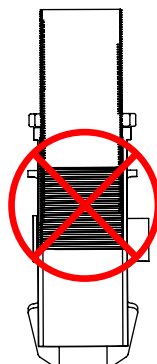
CAUTION

DO NOT ADJUST HEIGHT BY SPINNING AIR SPRING ON STRUT! DOING SO MAY CAUSE AN AIR LEAK AND COMPROMISE THE ASSEMBLY.

FOR STRUTS:

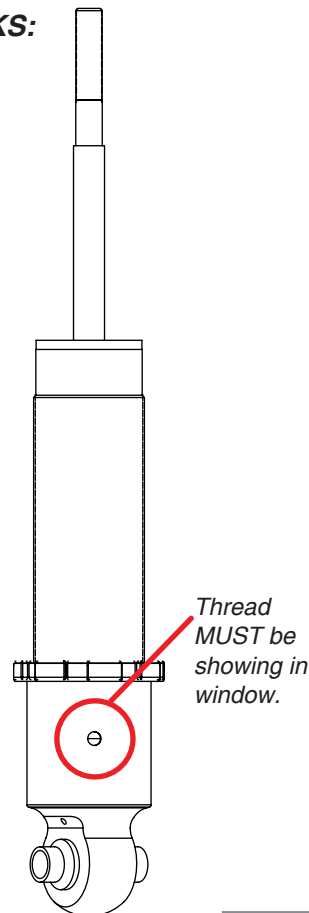


OK, no threads showing.



Not OK, threads are showing.

FOR SHOCKS:



Thread MUST be showing in window.

fig. 12