

AIR LIFT
PERFORMANCE

Kits 78662/78664

Volkswagen MKVII

Rear Application

**Independent Suspension
(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.



TABLE OF CONTENTS

Introduction	2
Notation Explanation	2
Important Safety Notices	2
Installation Diagram	3
Hardware List	3
Installing the Air Suspension	4
Preparing the Vehicle	4
Removal of Stock Suspension	4
Installing the Kit Components	6
Routing the Air Lines	9
Finished Installation	9
Before Operating	10
Setting the Ride Height	10
Torque Specifications	10
Suggested Driving Air Pressure and Maximum Air Pressure	10
Check for Binding	10
Installation Checklist	11
Damping Adjustment	11
Limited Warranty and Return Policy	12



Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Volkswagen MKVII. 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.

Installation Diagram

NOTE:
Kit 78662 uses
factory shocks.

CAUTION

THIS KIT REQUIRES THE REMOVAL OF FACTORY TORQUE-TO-YIELD BOLTS. THESE BOLTS ARE DESIGNED TO BE REPLACED AFTER THEY HAVE BEEN LOOSENED. TORQUE-TO-YIELD BOLTS ARE INDICATED IN THE INSTRUCTIONS AND IN THE TORQUE SPECIFICATION CHART.

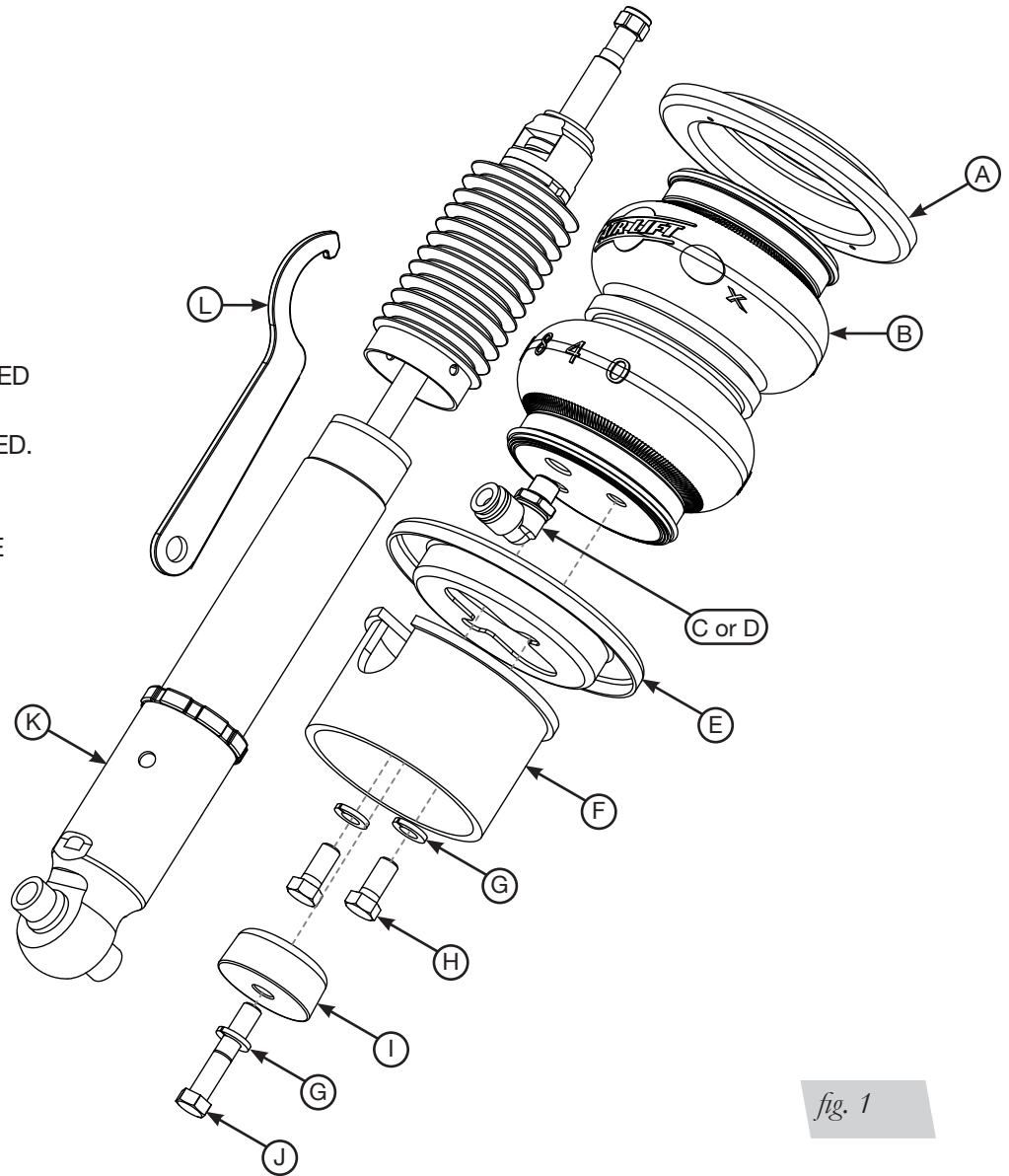


fig. 1

HARDWARE LIST

Item	Part #	Description	Qty	Item	Part #	Description	Qty
A	11805	Upper roll plate	2	G	18628	M10, Split lock washer	6
B	58547	Air spring	2	H	17517	M10 x 1.5 x 25 Hex cap screw	4
C	21779	1/4" MNPT x 1/4" PTC elbow, DOT	2	I	13991	Centering spacer.....	2
D*	21851	1/4" MNPT x 3/8" PTC, elbow, DOT	2	J	17930	M10 x 1.5 x 60 Hex cap screw	2
E	11803	Lower roll plate.....	2	K	26779	MKVII rear shock.....	2
F	03052	Spring seat.....	2	L	11289	Spanner wrench.....	1

*1/4" MNPT 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.

Installing the Air Suspension

NOTE

See important safety notices on page 2.

PREPARING THE VEHICLE

1. Elevate and support the vehicle with a hoist or safety stands. Remove the rear wheel (Figs. 2 & 3).

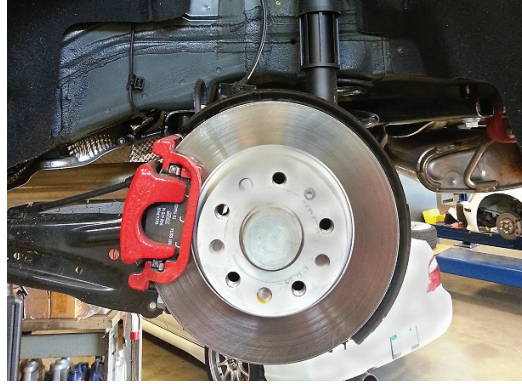


fig. 2



fig. 3

REMOVAL OF STOCK SUSPENSION

1. If the vehicle has the headlamp alignment system, unclip the armature from the bracket attached to the control arm. If it doesn't have this feature, skip to step 2. (Fig. 4).
2. Unbolt the stabilizer end link from the lower control arm. Disconnect the end link from the opposite side control arm (Figs. 5 & 6).

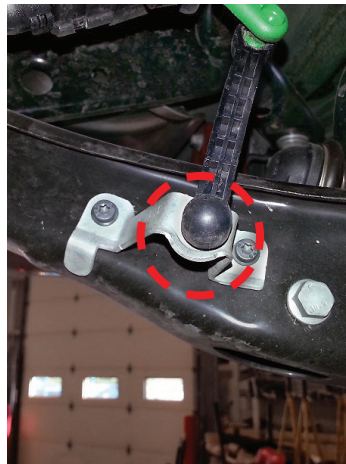


fig. 4



fig. 5



fig. 6

3. Remove the nut from the lower shock eye mount (Fig. 7).



fig. 7

4. Remove the outer hub-to-control arm bolt and nut (Fig. 8).



fig. 8

CAUTION

THE COIL SPRING IS UNDER PRESSURE. USE A JACK TO SUPPORT THE LOWER CONTROL ARM BEFORE REMOVING THE HUB AND SHOCK BOLTS.

5. Remove the shock and hub bolts (Fig. 9) and slowly lower the arm until the coil spring is free to remove (Figs. 10 & 11).



fig. 9

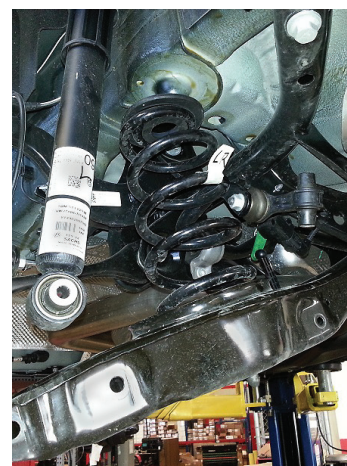


fig. 10



fig. 11

6. If installing kit 78662 without rear shocks, move on to Step 3 of *Installing the Kit Components*. Remove the fender liner and unbolt the shock upper mount (Fig. 12). Remove the assembly from the vehicle (Fig. 13).



fig. 12



fig. 13

INSTALLING THE KIT COMPONENTS

1. Disassemble the stock rear shock from the upper mount. Remove the lower dust cover and jounce bumper from the mount (Fig. 14). Install the upper mount to the Air Lift Performance shock with the adjuster lettering facing outboard (Figs. 15 & 16). Torque rod nut to 27Nm (20 lb.-ft.).

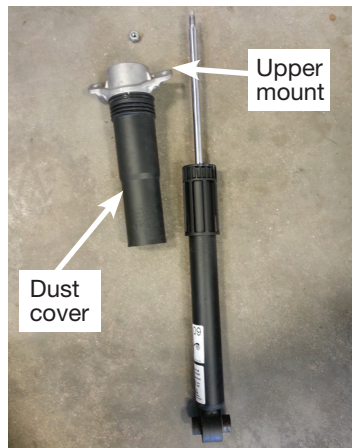


fig. 14

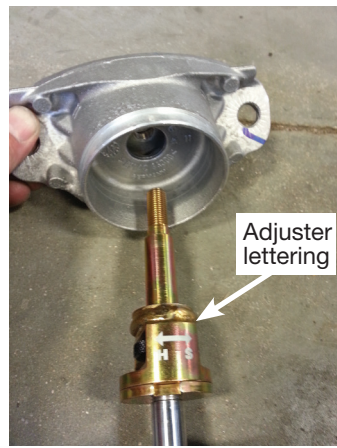


fig. 15



fig. 16

2. Apply the plastic cap to the top of the mount and reattach it to the vehicle chassis. Torque upper chassis bolts to 50Nm + 90 degrees (37 lb.-ft. + 90 degrees) (Fig. 17).

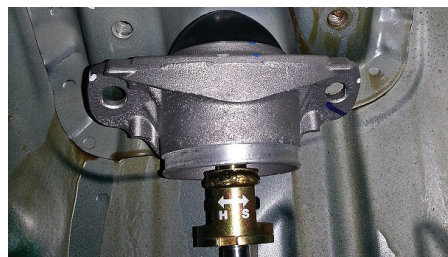


fig. 17

CAUTION

TORQUE-TO-YIELD BOLTS ARE DESIGNED TO BE REPLACED AFTER LOOSENING. TORQUE TO YIELD BOLTS HAVE AN ANGULAR TORQUE IN ADDITION TO THE TORQUE SPECIFICATION.

3. Lift the control arm, align the shock eye and attach with the shock eye bolt and nut. Do not torque at this time (Fig. 18).



fig. 18

4. Align the stabilizer end link and slide the bolt through the control arm and cap with the previously removed nut. Torque to 45Nm (33 lb.-ft.) (Fig. 19).



fig. 19

5. Apply thread sealant to the threads of the appropriate fitting. Tighten the fitting to the air spring 1 3/4 turns beyond hand-tight (Fig. 20).



fig. 20

- Place the roll plate on the bottom of the air spring. Install two 3/8"-24 x 7/8" hex bolts (H) with lock washers (G) through the spring seat into the air spring. Torque to 27Nm (20 lb.-ft.) (Fig. 21).



fig. 21

- Insert the assembly into the spring pocket with the air fitting pointed away from the wheel. Nest the upper roll plate over the air spring assembly (Figs. 22 & 23).
- Attach the air line. Leave the air line loose until the air spring installation is complete.



fig. 22



fig. 23

9. Install a 3/8" lock washer (G) and 3/8"-24 x 2" hex cap screw (J) and insert through the centering spacer (I) and the factory lower spring seat and thread into the provided spring seat. Torque the bolt to 27Nm (20 lb.-ft.) (Fig. 24).

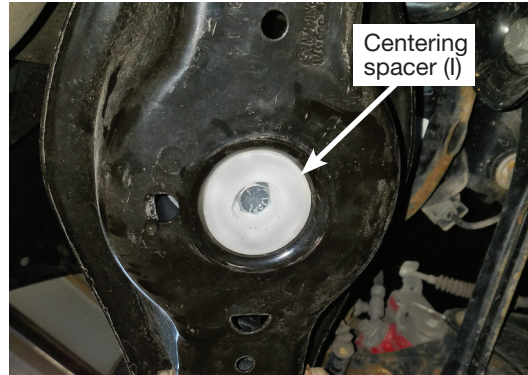


fig. 24

10. Reinstall the headlight alignment linkage if equipped.

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.

Finished Installation



fig. 25

Before Operating

SETTING THE RIDE HEIGHT

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

Torque Specifications		
Location	Nm	lb-ft
Lower control arm cam bolt	95	70
Lower control arm to stabilizer end link bolt	45	33
Lower control arm to shock eye bolt	95	70
Lower control arm to hub	90 + 90 degrees	66 + 90 degrees
Shock mount to chassis	50 + 90 degrees	37 + 90 degrees
Shock rod nut	27	20
Upper transverse link to subframe	95	70
Upper transverse link to hub	130 + 90 degrees	96 + 90 degrees
Tie rod to subframe	90 + 90 degrees	66 + 90 degrees
Tie rod to hub	130 + 90 degrees	96 + 90 degrees
Wheel studs	120	89
Braided air line threads	1 3/4 turns beyond hand-tight	

Table 1



CAUTION TORQUE-TO-YIELD BOLTS ARE DESIGNED TO BE REPLACED AFTER LOOSENING. TORQUE TO YIELD BOLTS HAVE AN ANGULAR TORQUE IN ADDITION TO THE TORQUE SPECIFICATION.

Suggested Driving Air Pressure	Maximum Air Pressure
45-80 PSI (3.1-5.5BAR)	125 PSI (8.6BAR)
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND WILL VOID THE WARRANTY.	

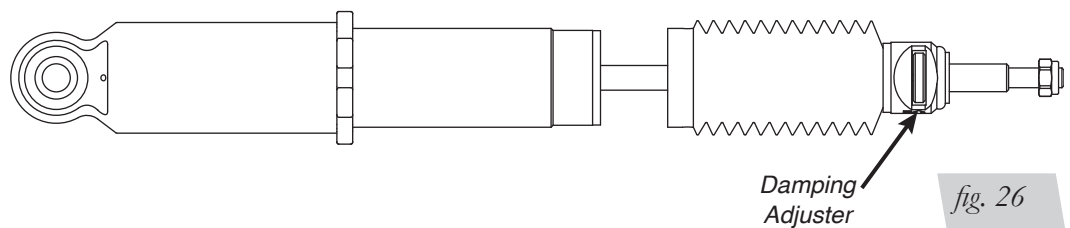
Table 2

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 air 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 (Fig. 26).
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 2015 Volkswagen Golf GTI with stock suspension.



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.

Air Lift Company 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 Company at **(800) 248-0892** or visit www.airliftperformance.com.

Need Help?

The Air Lift Company customer service department is open from 8 a.m. to 8 p.m. ET Monday through Friday. Call (800) 248-0892 or (517) 322-2144 for calls from outside the U.S. and Canada.



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



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
JPR-0920

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