

# **INSTALLATION GUIDE**



# Lexus IS (XE30 Facelift), GS (L10) and RC (XC10)

**REAR APPLICATION** 

Kit 76518

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 which could result in damage to the vehicle, minor to severe personal injury or death.

# Protect your Air Lift Performance Purchase by Completing your Warranty Registration



Thank you for purchasing an Air Lift Performance product! Take a photo of your sales receipt and then scan the QR code to complete your online warranty registration.

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### Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Lexus IS (XE30 Facelift) and GS (L10). 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 a suspension replacement project. Special tools needed to complete the installation are noted on the System Overview 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 VEHICLE OR MINOR PERSONAL INJURY.



#### NOTE

Used to help emphasize areas of procedural importance and provide helpful suggestions.

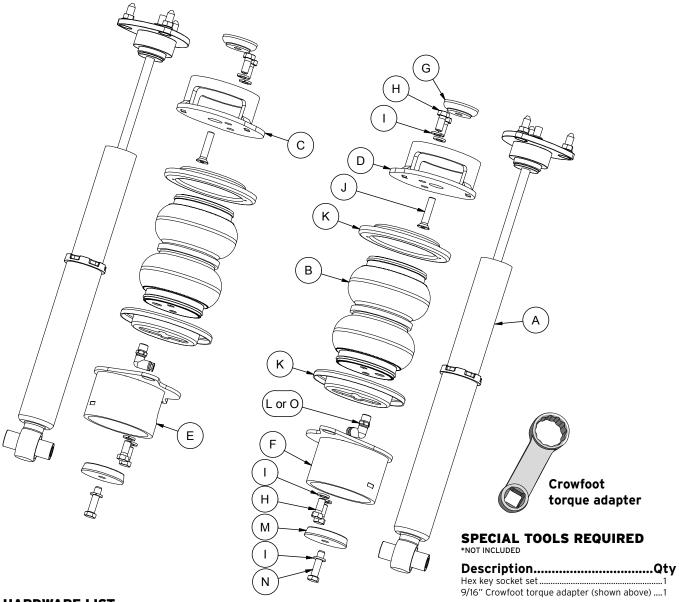


#### **TECH TIP**

Used to provide helpful tips to ease the installation process.



# **System Overview**



#### **HARDWARE LIST**

Item	Part #	Description	Qty
Α	39158	SHOCK, GS RWD, REAR	2
В	58535	AIR SPRING, 2B5	2
С	07047	BRACKET, XE30/L10, LR UPR	1
D	07046	BRACKET, XE30/L10, RR UPR	1
E	03029	BRACKET, XE30/L10 LR, LWR	1
F	03028	BRACKET, XE30/L10 RR, LWR	1
G	13321	SPACER, XE30/L10 REAR, UPR	2
Н	17203	3/8-24 X 7/8" HEX BOLT	8

Item	Part #	Description	Qty
1	18427	3/8" LOCK WASHER	10
J	17415	3/8-16 X 1 3/4", FHSHS, GRD 5	2
K	11803	ROLL PLATE, 2B5	4
L	21779	1/4" MNPT X 1/4" PTC ELBOW FITTING - DOT	2
М	13322	SPACER, XE30/L10 REAR, LWR	2
N	17108	3/8-16 X 1 1/2" HCS, GRD 5	2
0	21851	1/4 MNPT X 3/8 PTC ELBOW FITTING - DOT	2



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



# **Install the System**



See important safety notices on page 2.



USE SAFETY STANDS TO SUPPORT THE VEHICLE IF USING A JACK TO LIFT IT.

### **SECTION 1.**

### STOCK SUSPENSION REMOVAL

- 1. Remove the wheel and support the hub.
- 2. Remove the fender liner.
- 3. Disconnect the sway bar end link from the control arm (Fig. 1).

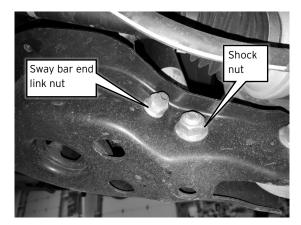


Fig. 1

- 4. Unbolt the shock from the control arm (Fig. 1).
- 5. Loosen the lower control arm inner pivot bolt.
- 6. With the lower control arm supported, disconnect the control arm from the hub (Fig. 2).



Fig. 2



7. Lower the control arm until the spring is relaxed. Remove the spring and rubber isolators (Fig. 3).

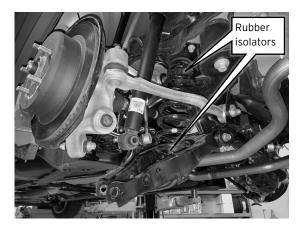


Fig. 3

8. From within the luggage compartment, pull the carpet back to access the upper shock mount and remove the upper shock mount nuts. Remove the shock assembly (Fig. 4).

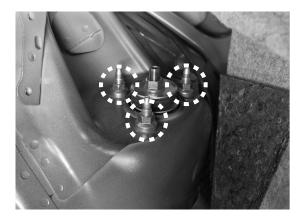


Fig. 4

### SECTION 2.

### **INSTALL THE KIT COMPONENTS**



### PLEASE READ - IMPORTANT INSTALLATION INFORMATION



**FOR COIL TO AIR UPGRADE KIT INSTALLATIONS ONLY:** Please refer to the included Coil to Air Upgrade Kit installation guide (MN-2000) for details on how to disassemble the coilovers and assemble the air springs.

Also refer to your control system installation guide to ensure the installation of your air suspension system is complete.



Fig. 6

1. Install the Air Lift Performance shock in the vehicle and attach with the upper mount nuts. Torque to 67Nm (49 lb.-ft.) (Fig. 5).



Fig. 5

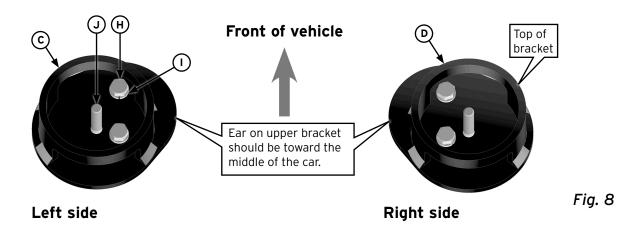
2. Slide the supplied upper centering spacer (G) through the side of the upper spring seat and nest it into the top side of the seat (Figs. 6 & 7).





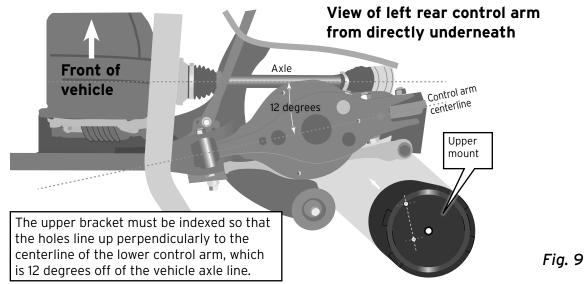
Fig. 7

3. Insert two 3/8"-24 x 7/8" hex-head bolts (H) with 3/8" lock washers (I) through the air spring mounting holes from the top of the upper bracket (C or D), labeled "L" and "R" (Fig. 8).





4. Orient the upper mount to the spring seat with the ear pointed toward the middle of the vehicle and attach it to the previously installed centering spacer (Fig. 9). Use the 3/8"-16 x 1 3/4" flat-head cap socket bolt (J) torqued to 27Nm (20 lb.-ft.).



5. Choose the appropriate swivel air fitting (L or O). Tighten the fitting to the air spring 1 3/4 turns beyond hand-tight (Fig. 10).



Fig. 10

6. Attach the air spring with a roll plate (K) to the installed upper mount. The air fitting on the bottom of the air spring must be toward the outside of the car (Fig. 11). Torque the bolts to 27Nm (20 lb.-ft.) using a 9/16" crowfoot torque adapter (see *System Overview* section).



Fig. 11



7. Assemble a roll plate (K) and the lower mount (E or F) to the air spring with 3/8"-24 x 7/8" bolts (H) and 3/8" lock washers (I) (Fig. 12). Torque the bolts to 27Nm (20 lb.-ft.) using the crowfoot adapter.

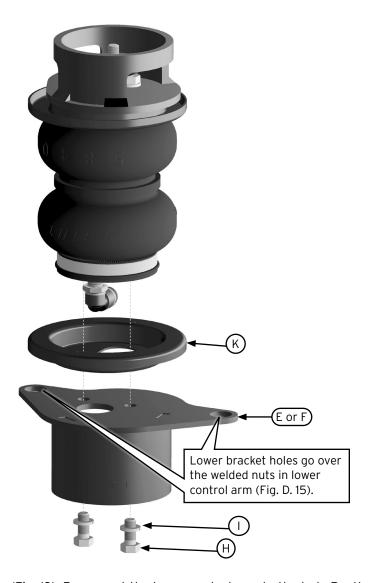


Fig. 12

8. Install the shock bushing spacers (Fig. 13). Reconnect the lower control arm to the hub. Reattach the lower shock mount bolt and nut (Fig. 14). Torque both, along with the lower control arm pivot bolt, during the "Set The Ride Height" steps.

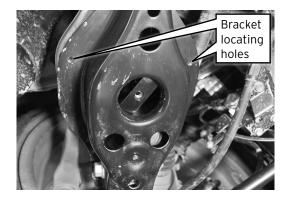




Fig. 14



9. Install the lower centering spacer (M) with 3/8"-16 x 11/2" hex-head bolt (N) and lock washer (I) through the lower control arm, attaching it to the lower bracket. Torque to 27Nm (20 lb.-ft.) (Figs. 15 & 16).



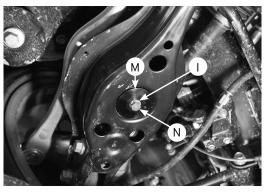


Fig. 16

- Fig. 15
- 10. Reattach the sway bar end link. Torque to 70Nm (52 lb.-ft.).
- 11. Reinstall the fender liner.

### SECTION 3.

#### **ROUTE THE AIR LINES**



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.

- 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 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.

### (i)

#### PLEASE READ - IMPORTANT INSTALLATION INFORMATION

Please refer to your control system installation guide for more details on air line routing and to ensure the installation of your air suspension system is complete.

### **Before Operating**

### SET THE RIDE HEIGHT

1. Refer to the User Guide supplied with this kit to set up the suspension.

Torque Specifications						
Location	Nm	Lbft.				
Upper shock mount nuts	67	49				
Air spring attaching bolts	27	20				
Upper and lower bracket mounting bolts	27	20				
End link nut	70	52				
Control arm pivot bolt	150	111				
Lower shock mount bolt to control arm	110	81				
Control arm to hub	145	107				
Air fitting	1 3/4 turns beyond hand-tight					
Wheel studs	103	76				

2. Upon successful completion of the installation, follow these pressure requirements for the air springs.







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

### CHECK FOR BINDING



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

- 1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) 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 5.2-6.2BAR (75-90 PSI) and check all connections for leaks.



#### INSTALLATION CHECKLIST

<b>Clearance</b> – Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and make sure there is at least 13mm (1/2") 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 5.2-6.2BAR (75-90 PSI) 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 152mm (6") 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.
<b>Road –</b> Inflate the air springs to recommended driving pressures (see previous page). Drive the vehicle 16km (10 miles) 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 paperwork that came with the kit.

#### DAMPING ADJUSTMENT

1. The dampers in this kit have 32 settings, or "clicks," of adjustable compression and rebound damping characteristics. Damping is changed through the damper rod using the supplied adjuster (example shown here) 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 will need to be set after installation and your initial drive, as they are not pre-set. It may take multiple adjustments to dial in your ideal ride. A good starting point is in the middle at 16 clicks from full soft, then drive the vehicle and make adjustments either softer or stiffer.

For more information, refer to the user guide.

MN-2518 = 11



# **Limited Warranty and Return Policy**

Air Lift Company provides a limited warranty to the original purchaser of Air Lift Performance Air Suspension kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on cars and trucks 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.

\* Full Limited Warranty and Return Policy are available at www.airliftperformance.com/warranty and are subject to change.

#### **WARRANTY REGISTRATION & CLAIMS**

- To register your warranty, please visit https://www.airliftperformance.com/support/warranty-registration/
- To submit a warranty claim, please visit https://www.airliftperformance.com/support/submit-warranty-claim/

## **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 +1 (517) 322-2144 for calls from outside the U.S. and Canada.







Connect by searching for **Air Lift Performance** #LifeonAir





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