

## Kit 78569

Lexus GS (L10), RC (XC10) and IS (XE30 facelift)

Front Application



## **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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### A. Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for Lexus GS (L10), RC (XC10) and IS (XE30 facelift) models with fork-style shocks. 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 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 VEHICLE OR MINOR PERSONAL INJURY.

**NOTE** 

Indicates a procedure, practice or hint which is important to highlight.

## **B. Important Safety Notices**



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



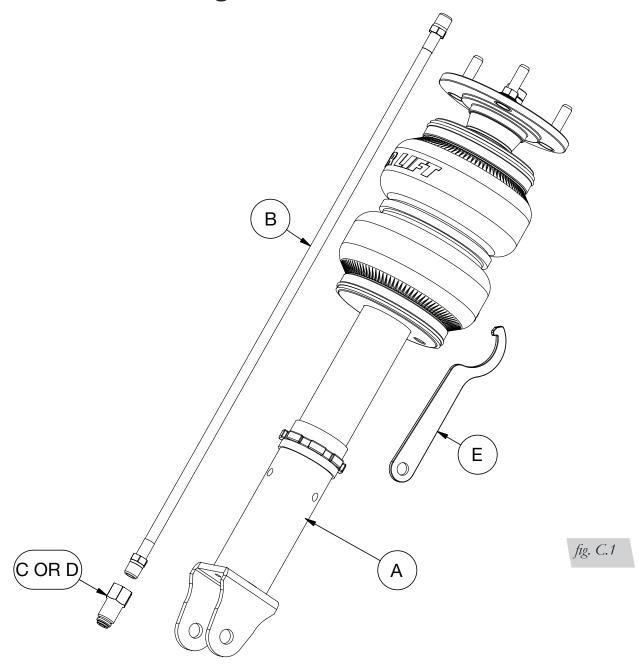
DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



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.



# **C. Installation Diagram**



#### **HARDWARE LIST**

Qty
2
2
2
2
1

STOP!

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

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# **D. Installing the Air Suspension**

**NOTE** 

See "Important Safety Notices" on page 2.

#### REMOVING THE STOCK SUSPENSION



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

- 1. Disconnect the end link from the sway bar (Fig. D.1). Remove the sensor wire bracket from the shock.
- 2. With the hub supported, remove the lower shock bolt and nut (Fig. D.1).

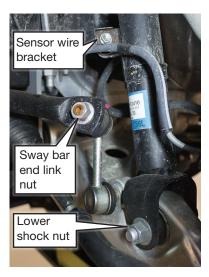


fig. D.1

3. Remove the cotter pin and castle nut from the steering knuckle (Fig. D.2). Disconnect the knuckle from the upper control arm.



fig. D.2



4. If equipped with Adaptive Variable Suspension, remove the shock absorber cap on the upper shock mount (Fig. D.3). Disconnect and remove the stepper motor (Fig. D.4). The stepper motor will not be reinstalled with the Air Lift Performance kit.

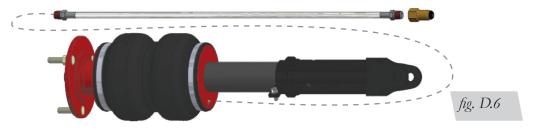
5. Remove the upper mount nuts (Fig D.5).



6. Remove the shock from the vehicle.

#### INSTALLING THE AIR SUSPENSION

1. Begin by installing the leader line into the air spring. Tighten the appropriate fitting to the leader line 1 3/4 turns beyond hand-tight. Tighten the leader line into the air spring 1 3/4 turns beyond hand-tight (Fig. D.6).



2. Insert the shock assembly so that the leader line is oriented inboard and attach the upper mount to the chassis. Torque the nuts to 67Nm (49 lb.-ft.) (Fig. D.7).



fig. D.7

3. The installer has the choice whether to reinstall the shock absorber cap. If reinstalled, torque the nuts to 20Nm (14 lb.-ft.)

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- 4. Use the jack to align the shock mount with the lower control arm attaching point. Insert the lower shock bolt from the rear of the shock. The nut has its own stopper. Do not rotate the nut against the control arm. Torque the bolt at ride height (Fig. D.8).
- 5. Reconnect the steering knuckle to the upper control arm. Torque the castle nut to 87Nm (64 lb.-ft.). Reinsert the cotter pin (Fig. D.8).



fig. D.8

- 6. Reconnect the sway bar end link. Torque to 84Nm (62 lb.-ft.) (Fig. D.9).
- 7. Reattach the sensor wire bracket. Torque to 13.5Nm (120 lb.-in.) (Fig. D.9).

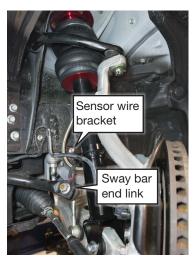


fig. D.9

#### **ROUTING AIR LINES**

- 1. 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.
- 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.



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.



# **E. 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.	Lbin.	
Sway bar end link nut	84	62		
Upper shock mount nuts	67	49		
Shock absorber cap	20	14		
Steering knuckle nut	87	64		
Sensor wire bracket	13.5		120	
Lower shock mount bolt to control arm	108	80		
Wheel lugs	103	76		
Braided air lines/fittings	1 3/4 turns beyond hand-tight			

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure	
60-75 PSI (4.1-5.2BAR)	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**

<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 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)</b> 248-0892.
Fastener — Recheck all bolts for proper torque.
<b>Road</b> — Inflate the 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 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. E.1 & E.2) or a 3mm hex key (not included).
- 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 "-23 clicks." This means that the damper is adjusted 23 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 2017 Lexus IS 350 F-Sport with stock suspension.

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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