



INSTALLATION GUIDE



LEXUS GS 300/350 IS 250/350 AWD

FRONT APPLICATION

Kit 76043

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.



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your warranty.**

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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 GS 300/350 & IS 250/350 AWD. 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 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

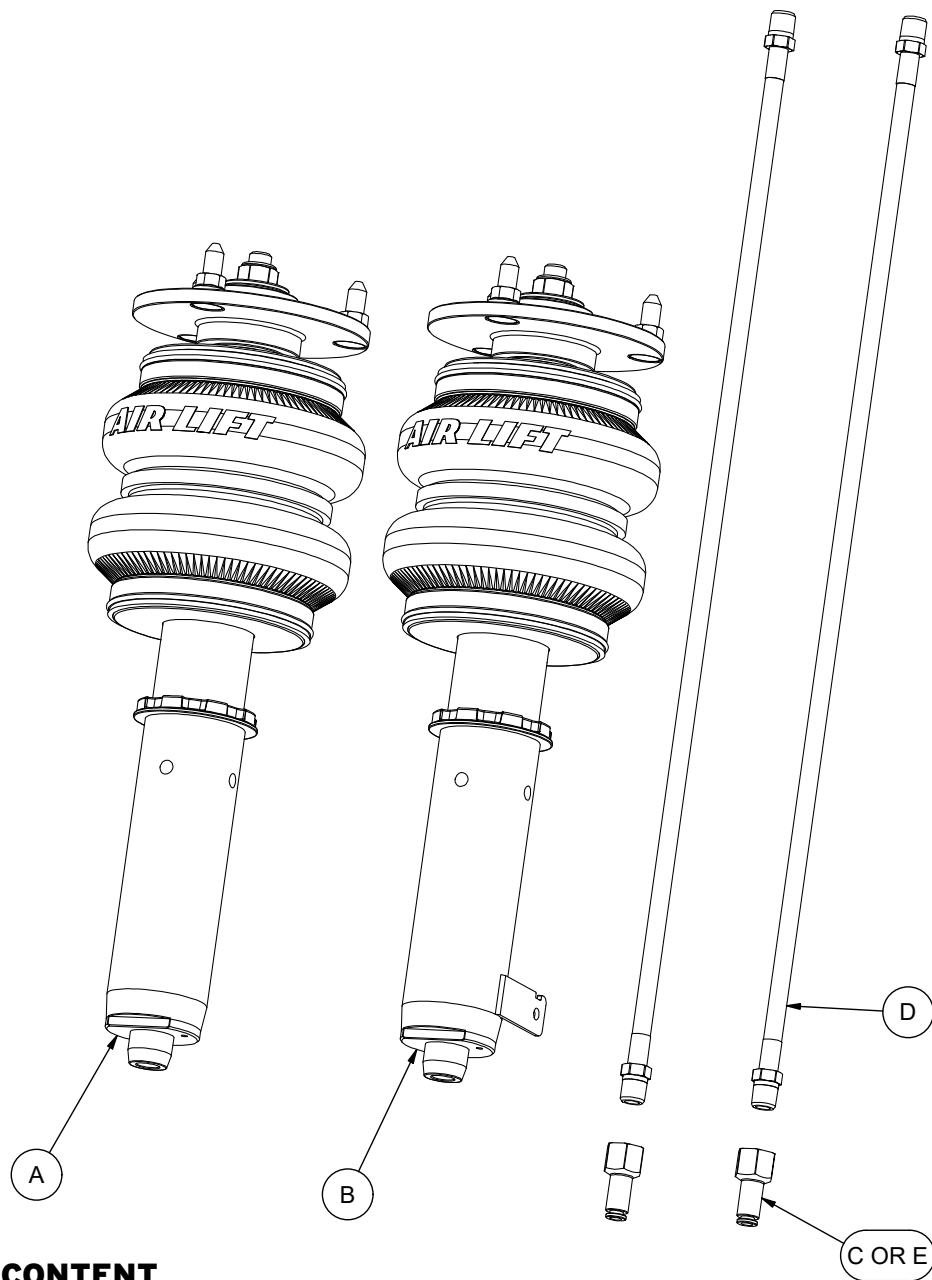


Fig. 1

HARDWARE CONTENT

Item	Part #	Description	Qty
A	35765	STRUT ASSEMBLY, GS AWD (06-12), RF	1
B	35766	STRUT ASSEMBLY, GS AWD (06-12), LF	1
C	21810	1/4" FNPT X 1/4" PTC FITTING, DOT	2
D	20997	LEADER LINE, 1/4" ID	2
E	21987	1/4" FNPT X 3/8" PTC FITTING, DOT	2



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

Install the System



NOTES

See important safety notices on page 2.

SECTION 1. PREPARE THE VEHICLE

1. Elevate and support the vehicle with a hoist or safety stands.
2. Remove the front wheel and support the hub assembly. (Fig. 2)

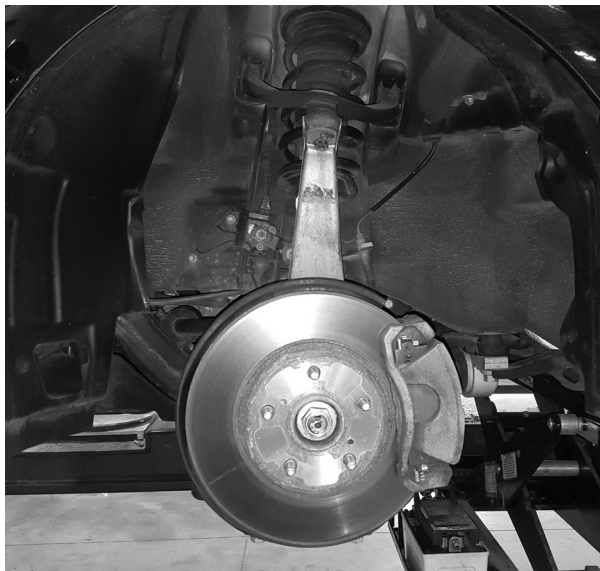


Fig. 2

SECTION 2. STOCK SUSPENSION REMOVAL

1. Detach the headlight alignment linkage from the lower control arm. (Figs. 3 & 4)



Fig. 3



Fig. 4

2. Unbolt the wiring support bracket from the shock and steering knuckle. (Figs. 5-8)



Fig. 5



Fig. 6



Fig. 7



Fig. 8

3. Loosen the bolt that connects the lower mount to the shock. This bolt does not need to be removed at this time but loosening it now will make the disassembly easier when the shock is out of the vehicle. (Figs. 9 & 10)



Fig. 9



Fig. 10

4. Remove the lower mount nut and keyed washer. (Figs. 11 & 12)



Fig. 11



Fig. 12

5. Within the engine compartment, remove the upper shock mount cover and three nuts. (Fig. 13)



Fig. 13

6. Remove the cotter pin from the tie rod end and remove the nut from the steering knuckle. Separate the tie rod end from the steering knuckle. (Figs. 14-16)



Fig. 14



Fig. 15



Fig. 16



CAUTION

SUPPORT THE HUB TO PREVENT OVER-EXTENSION OF COMPONENTS BEFORE PROCEEDING.

7. Remove the cotter pin from the upper control ball joint. Remove the nut and separate the ball joint from the steering knuckle. (Figs. 17-19)



Fig. 17



Fig. 18



Fig. 19

8. Remove the shock assembly from the vehicle. (Fig. 20)



Fig. 20

9. Reattach the spindle to the upper control arm ball joint. Torque to 87Nm (64 lb.-ft.). Install the cotter pin through the ball joint nut. (Figs. 21 & 22)



Fig. 21



Fig. 22

10. Remove the lower mount bolt and separate the shock from the mount. (Fig. 23)



Fig. 23

SECTION 3. 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.

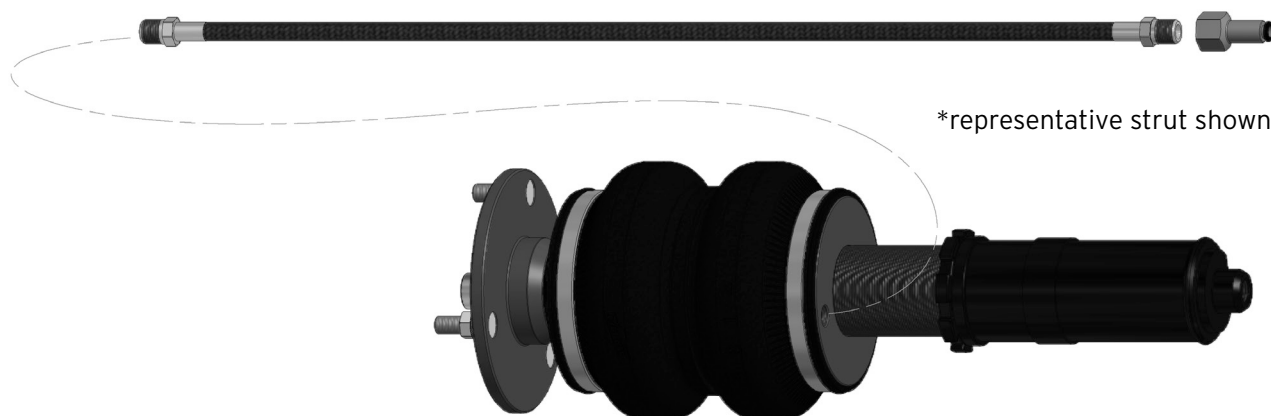


NOTES

All dampers come pre-set to even lengths, and locking collars are pre-tightened. It is always recommended to double-check that the dampers are the same length side to side, and the locking collars are tight.

Please refer to the User Guide included with the kit for any suspension setup adjustments.

1. Begin by installing the leader line (D) into the air spring. Tighten the appropriate fitting (C or E) 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. 24).



*representative strut shown

Fig. 24

2. Attach the shock to the lower mount. Torque bolt to 48Nm (35 lb.-ft.). (Figs. 25-27)



Fig. 25



Fig. 26



Fig. 27

3. Insert the shock assembly into the shock tower while aligning the three upper bracket studs with the associated holes. Torque the upper bracket nuts to 67Nm (49 lb.-ft.) (Figs. 28 & 29).



Fig. 28

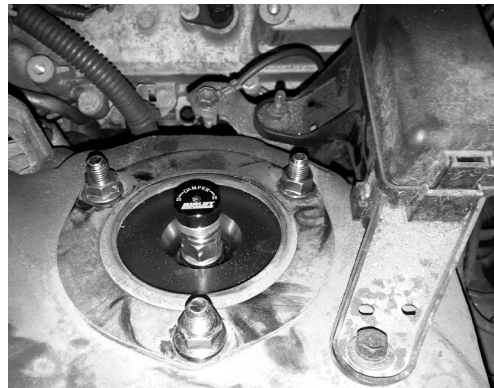


Fig. 29

4. Slide the lower mount stud through the lower control arm. Reinstall the lock washer and nut. Snug, but do not torque, the lower bushing bolt at this time. Bolt torque must be done when vehicle is at the desired ride height. (Figs. 30 & 31)



Fig. 30



Fig. 31

5. Reattach tie rod end to the steering knuckle. Torque to 65Nm (48 lb.-ft.). Reinstall the cotter pin. (Fig. 32)



Fig. 32

6. Reattach brake line bracket. Torque bolts to 6Nm (4.4 lb.-ft.). (Fig. 33)



Fig. 33

7. Align and attach the height sensor to the lower control arm. Torque to 5.4Nm (47.8 lb.-in.). (Fig. 34)



Fig. 34

SECTION 4. ROUTE THE AIR LINES



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.

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 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.



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	Lb.-ft.	Lb.-in.
Upper control arm to steering knuckle	87	64	–
Toe link to steering knuckle	65	48	–
Shock to lower mount bolt	48	35	–
Upper mount nuts	67	49	–
Lower mount stud to lower control arm	112	82	–
Brake line bracket bolt	6	4.4	–
Height sensor bolt	5.4	–	47.8
Wheel lug	103	76	–
Air fitting and leader line with sealant	1 3/4 turn beyond hand-tight		

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



Suggested Driving Air Pressure



Maximum Air Pressure



CAUTION

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



CAUTION

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

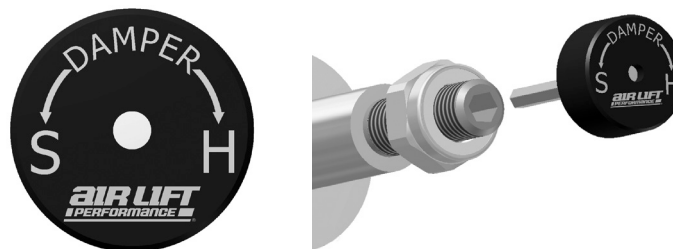
1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and check all connections for leaks.

INSTALLATION CHECKLIST

- ☐ **Clearance** – 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.
- ☐ **Leak** – 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.
- ☐ **Heat** – 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 **(800) 248-0892**.
- ☐ **Fastener** – Recheck all bolts for proper torque.
- ☐ **Road** – 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.
- ☐ **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 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.

Thank you for purchasing Air Lift Performance products!

Need Help?

Contact Air Lift Company Customer Service at
(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

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



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