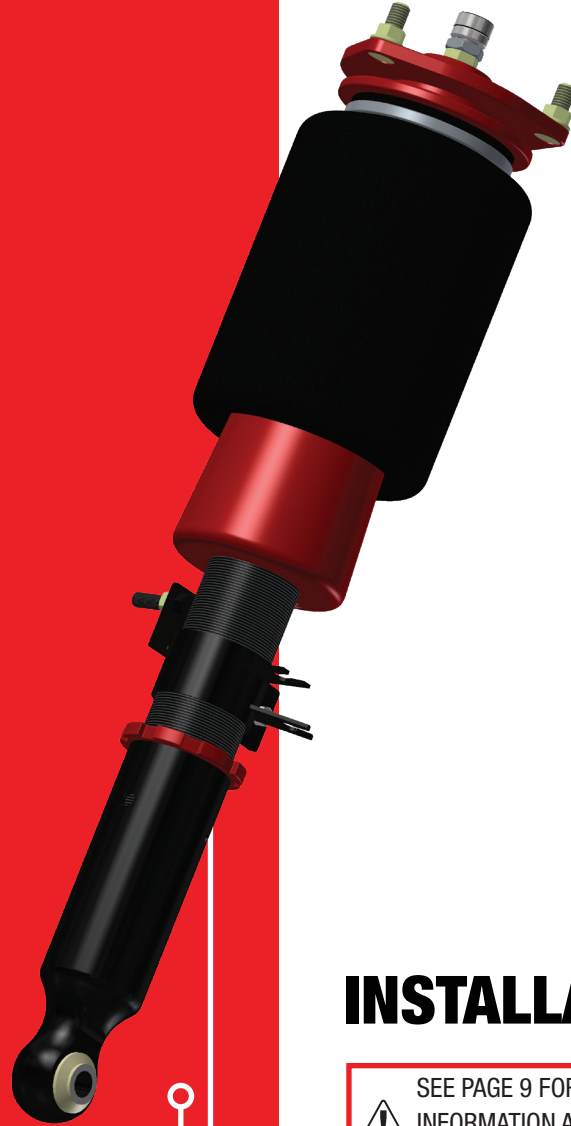


AIR LIFT
PERFORMANCE

Kit 75521

Nissan Z (RZ34)
Nissan 370z (Z34)
Infiniti G37
(except AWD)

Front Application



INSTALLATION GUIDE



SEE PAGE 9 FOR IMPORTANT
INFORMATION ABOUT SLEEVE-STYLE DAMPERS
BEFORE INSTALLATION.

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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Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Nissan Z (RZ34)/Nissan 370z (Z34)/Infiniti G37 (except 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 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.

 **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 MACHINE OR MINOR PERSONAL INJURY.

NOTE

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

Important Safety Notices

 **WARNING**

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

 **CAUTION**

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

Installation Diagram

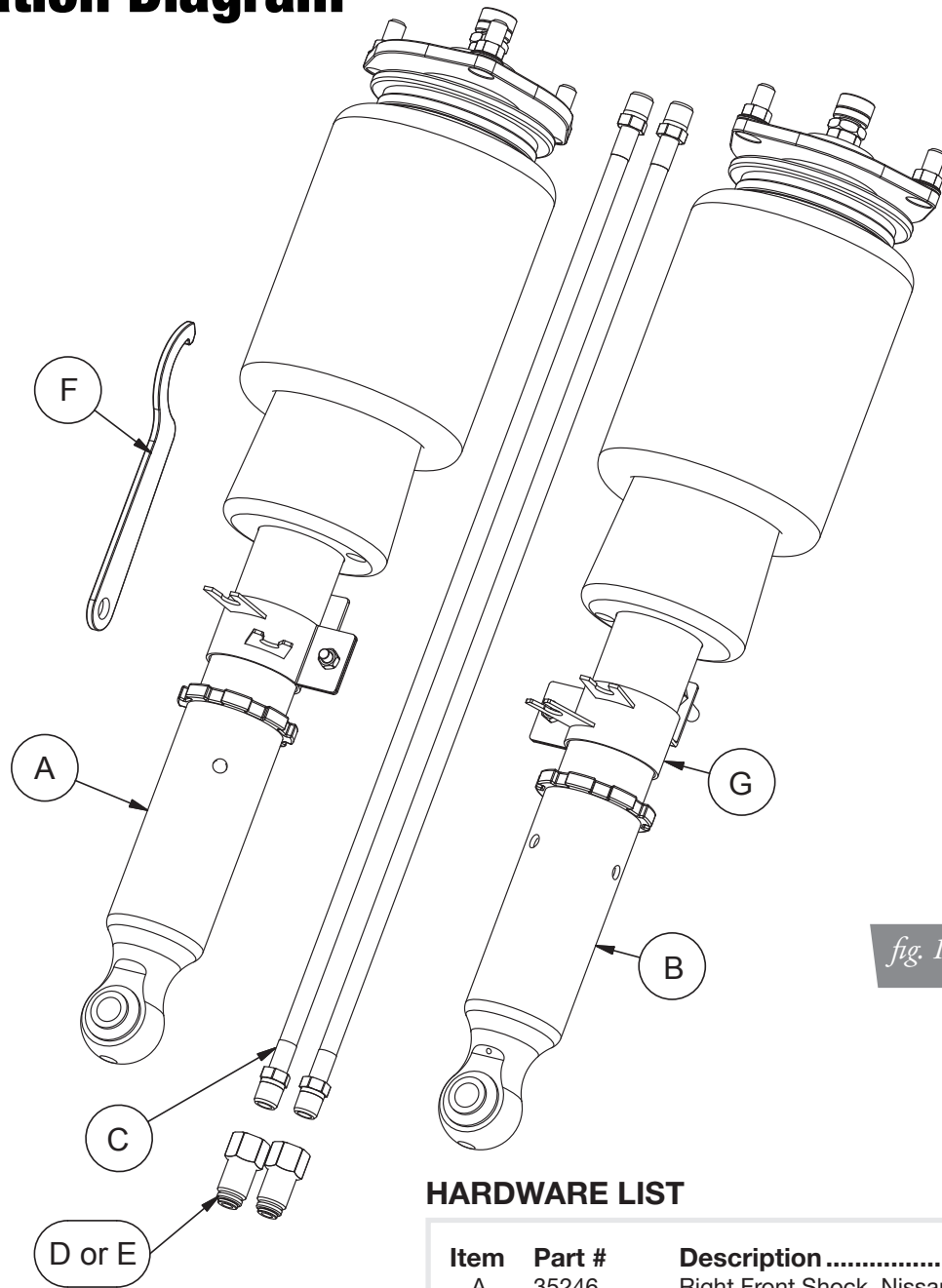


fig. 1

HARDWARE LIST

Item	Part #	Description	Qty
A	35246	Right Front Shock, Nissan Z34	1
B	35247	Left Front Shock, Nissan Z34	1
C	20997	Leader line, 1/4" NPT.....	2
D	21810	1/4" FNPT X 1/4" PTC Fitting "DOT" ...	2
E	21987*	1/4" FNPT X 3/8" PTC Fitting "DOT" ...	2
F		Spanner wrench.....	1
G		Brake line bracket**	2

*1/4" MNPT x 3/8" PTC fittings are NOT included in this kit, but are available as a special order.

**Brake line bracket is unused for the Nissan Z (RZ34) and requires removal.



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

Installing the Air Suspension

PREPARING THE VEHICLE

1. Elevate and support the vehicle with safety stands or a hoist at approved lifting points.
2. Remove the front wheels.

REMOVAL OF STOCK SUSPENSION

1. Support the hub assembly to prevent over-extension of suspension components.
2. Disconnect the stabilizer bar end link from the stabilizer bar. Unthread the lower shock mount nut from the stabilizer bar end link and remove end link from the vehicle (Figs. 2-4).



fig. 2



fig. 3



fig. 4

CAUTION

SKIP STEP 3 BELOW FOR THE NISSAN Z (RZ34) ONLY.

3. Disconnect the wheel speed sensor wire and brake line from the shock (Figs. 5 & 6).



fig. 5

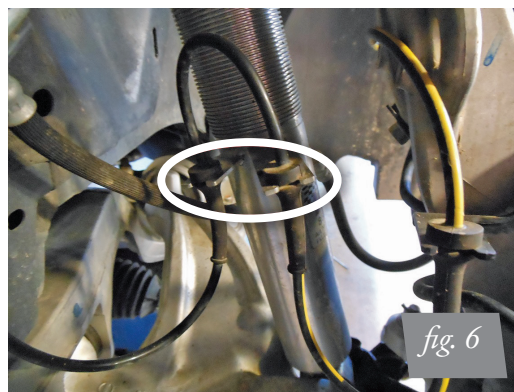
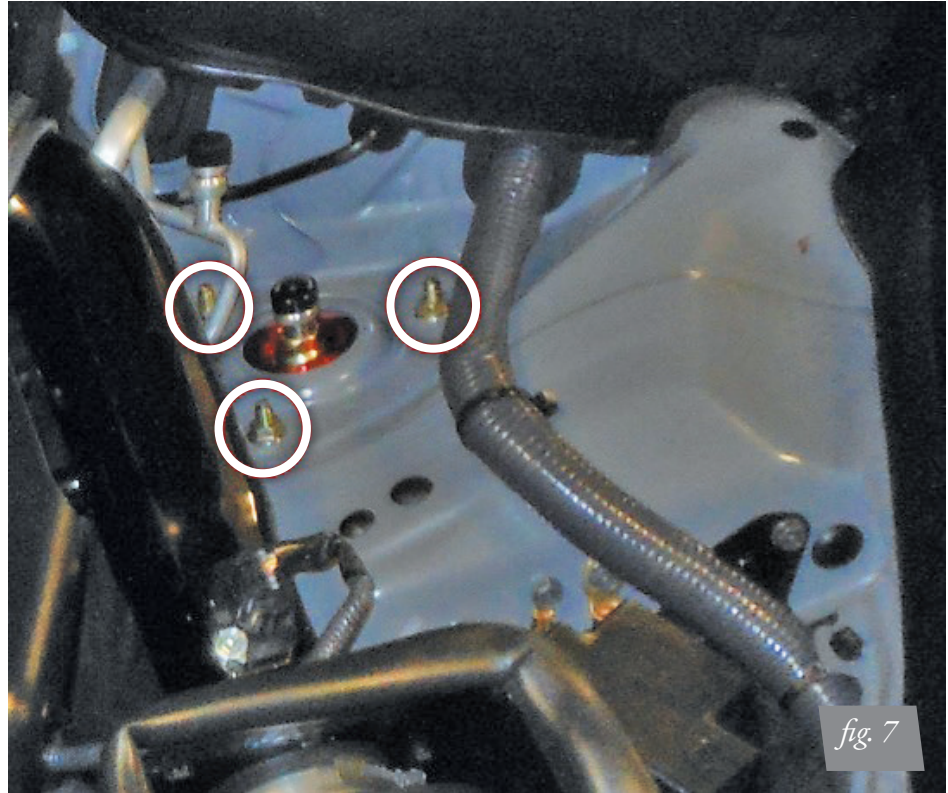


fig. 6

4. Within the engine compartment, unbolt and remove the three shock upper mount bolts. Z (RZ34)/370z (Z34) models will need to have the shock tower brace removed to access the upper shock mounts (Fig. 7).



5. Remove shock from the vehicle and remove the thin gasket material from the shock upper mount and place on the new assembly (Fig. 8).

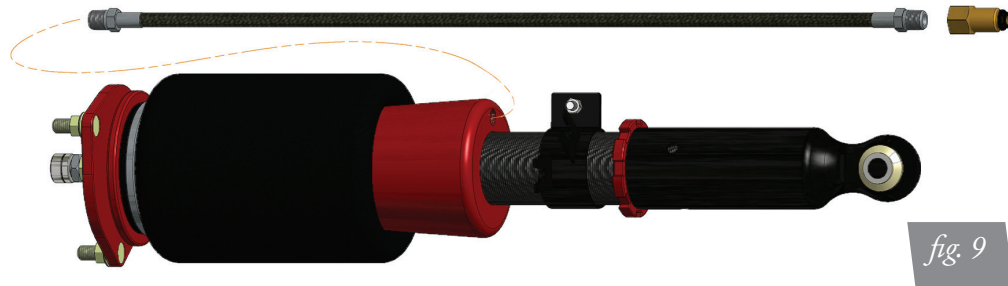


INSTALLING THE KIT COMPONENTS

CAUTION

FOR THE NISSAN Z (RZ34), THE BRAKE LINE BRACKET (G) IS NOT USED AND REQUIRES REMOVAL FROM THE SHOCK ASSEMBLIES. REMOVE THE BOLT FROM THE BRACKET AND PRY THE BRACKET OPEN, REMOVING IT FROM THE SHOCKS.

1. Begin by installing the leader line into the air spring. Apply thread sealant to the threads of the leader line. Tighten the appropriate fitting to the air line (1 3/4 turns beyond hand-tight). Tighten the leader line into the air spring 1 3/4 turns beyond hand-tight (Fig. 9).



2. Insert the shock assembly into the shock tower and attach the upper bracket to the chassis. The shock should be installed so that the air spring air port is directed toward the engine compartment. Torque the upper bracket nuts to 38.5Nm (28 lb.-ft.).
3. Attach the shock eye mount to the lower transverse link. Do not torque the attaching bolt at this time.

CAUTION

SKIP STEP 4 BELOW FOR THE NISSAN Z (RZ34) ONLY.

4. Clip the wheel speed sensor wire onto the bracket on the shock body. Fasten the brake line to this bracket and torque to 22Nm (16 lb.-ft.).
5. Z (RZ34)/370z (Z34) models: Reattach the tower brace. Torque to 45Nm (33 lb.-ft.).

ROUTING THE 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.

Before Operating

SETTING THE RIDE HEIGHT

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

Torque Specifications		
Location	Nm	lb-ft
Upper bracket to chassis	38.5	28
Upper control arms to bracket	70	52
Transverse link to shock clevis	107	79
Transverse link to subframe	130	96
Stabilizer link to transverse link	87.5	65
Wheels	108	80
Tower brace	45	33
Brake line bracket nut	22	16

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure
100 PSI (6.9BAR)	150 PSI (10.3BAR)
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND WILL VOID THE WARRANTY.	

Table 2

CHECK FOR BINDING

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



CAUTION

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

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

The shocks in this kit have 30 settings, or “clicks”, of adjustable compression and rebound damping characteristics. Damping is changed through the shock rod using the supplied adjuster (figs. 10 & 11) or a 3mm allen wrench.

Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened.

Each shock is preset to “-18 clicks”. This means that the shock is adjusted 18 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2012 Infiniti G37 sedan and may need to be adjusted to different vehicles and driving characteristics.



fig. 10

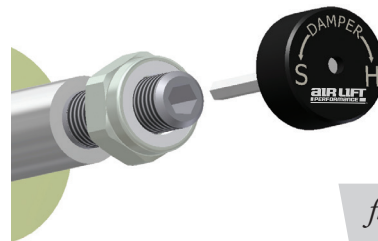


fig. 11

AFTER INITIAL INSTALLATION OF SLEEVE-STYLE DAMPERS

CAUTION

DO NOT CYCLE THE SUSPENSION WITH THE AIR LINE CONNECTED TO THE LEADER LINE WITHOUT FIRST ADDING AIR SPRING PRESSURE. DOING SO MAY CAUSE THE AIR SPRING TO IMPROPERLY INFLATE (FIG. 12). IT IS SAFE TO CYCLE THE SUSPENSION TO CHECK FOR CLEARANCES ETC. WITH THE LEADER LINE OPEN TO ATMOSPHERE (DISCONNECTED FROM AIR LINE).

BEFORE SETTING VEHICLE ON THE GROUND FOR THE FIRST TIME, IT IS VERY IMPORTANT TO INFLATE THE AIR SPRINGS TO AT LEAST 50 PSI. THIS WILL PREVENT ANY POSSIBILITY OF THE AIR SPRING KICKING OUT AND CAUSING A LEAK (FIG. 13). REFERENCE FIG. 14 FOR PROPERLY INFLATED AIR SPRING.



fig. 12

Caused by cycling with air line attached without pressure. Remove air-line from spring to release vacuum and re-attach. Inflate to more than 50 PSI before lowering car to ground.
Do NOT drive!



fig. 13

Shows what spring looks like after lowering car to ground with less than 50 PSI and raising it with air pressure.
Do NOT drive!



fig. 14

Shows what spring looks like when installed correctly.

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?

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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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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