



# Kit 78581

Nissan L32/L33/A35/A36

***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.*

## TABLE OF CONTENTS

<b>A. Introduction</b>	<b>2</b>
Notation Explanation	2
<b>B. Important Safety Notice</b>	<b>2</b>
<b>C. Installation Diagram</b>	<b>3</b>
Hardware List	3
<b>D. Installing the Air Suspension</b>	<b>4</b>
Removing the Stock Suspension	4
Installing the Kit Components	7
Routing the Air Lines	9
<b>E. Before Operating</b>	<b>10</b>
Setting the Ride Height	10
Torque Specifications	10
Suggested Driving Air Pressure	10
Maximum Air Pressure	10
Check for Binding	10
Installation Checklist	11
Damping Adjustment	11
<b>Limited Warranty and Return Policy</b>	<b>13</b>

## A. Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Nissan Altima L32/L33/A35/A36. 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](http://www.airliftperformance.com).

An Air Lift Performance air management system is highly recommended for this product. Learn more at [air-lift.co/productlines](http://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

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

## B. 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.



#### 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.

## C. Installation Diagram

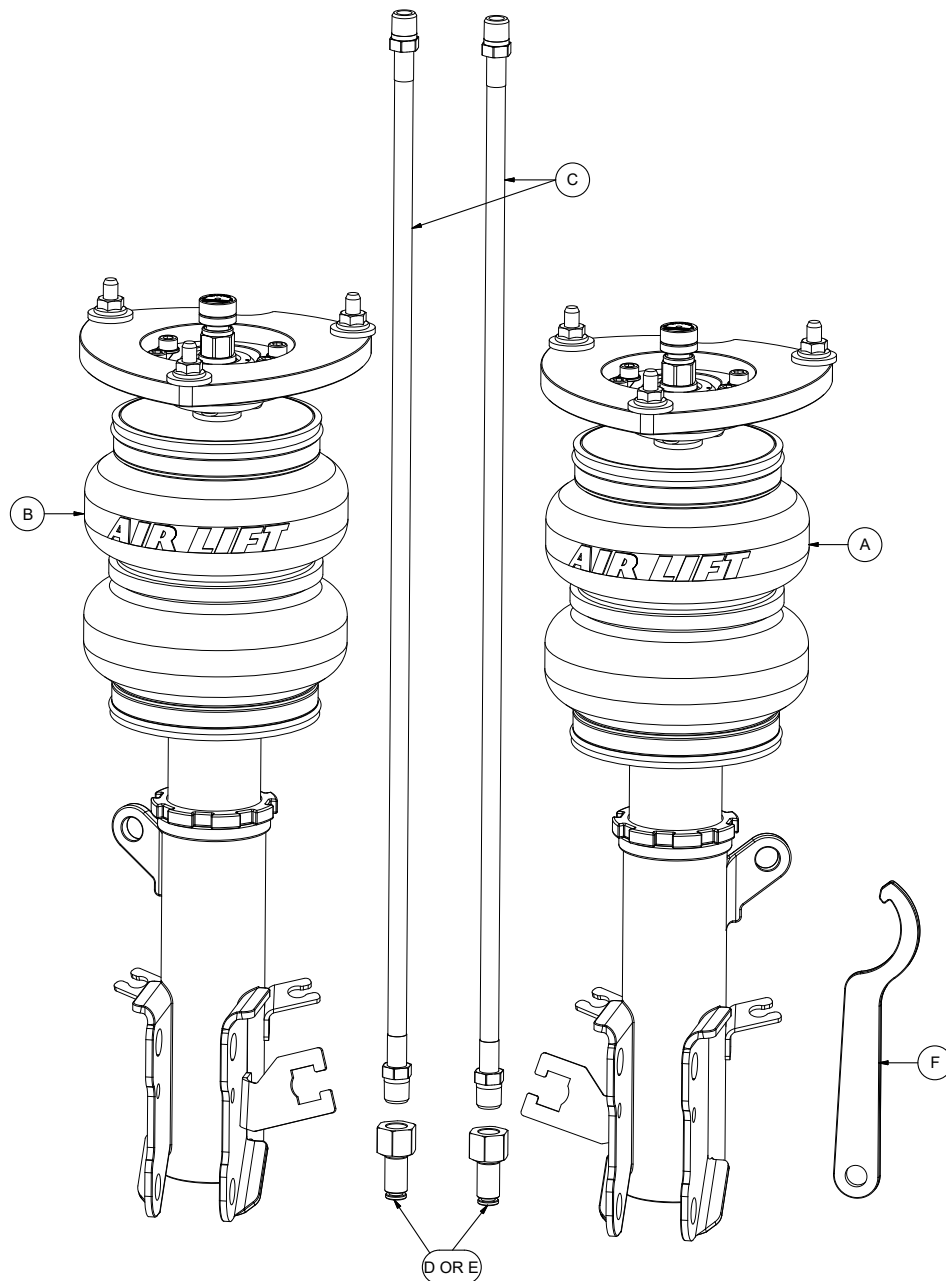


fig. C.1

### HARDWARE LIST

Item	Part #	Description .....	Qty
A	35445	Strut, left front.....	1
B	35446	Strut, right front .....	1
C	20997	Leader line 1/4" ID .....	2
D	21810	Fitting 1/4" PTC-1/4" FNPT .....	2
E	21987	Fitting 3/8" PTC-1/4" FNPT .....	2
F	11289	M50 Spanner .....	1



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

## D. Installing the Air Suspension

### NOTE

See "Important Safety Notices" on page 2.

### REMOVING THE STOCK SUSPENSION

1. Raise the vehicle and remove the wheel. Support the suspension with a safety stand (Figs. D.1, D.2 & D.3).



*fig. D.1*



*fig. D.2*



*fig. D.3*

2. Disconnect ABS sensor wire from strut brackets (Fig. D.4).



*fig. D.4*

3. Remove brake hose retainer clip and remove brake hose from bracket (Figs. D.5 & D.6).



*fig. D.5*



*fig. D.6*

4. Unfasten nut from sway bar end link. Remove sway bar end link from strut tab (Figs. D.7 & D.8).



*fig. D.7*



*fig. D.8*

5. Remove lower strut mount bolts. Separate the lower mount from the steering knuckle (Figs. D.9 & D.10).

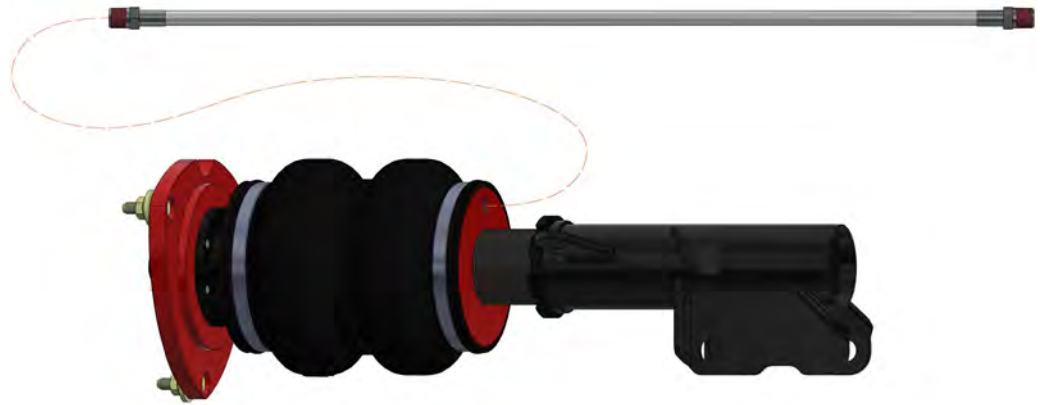
*fig. D.9**fig. D.10*

6. Remove upper strut mount bolts and remove strut from the vehicle (Figs. D.11 & D.12).

*fig. D.11**fig. D.12*

## INSTALLING THE KIT COMPONENTS

1. Begin by installing the air line into the air spring. Tighten the appropriate fitting to the air line (1 3/4 turns beyond hand-tight). Tighten the air line into the air spring 1 3/4 turns beyond hand-tight (Fig. D.13).



*fig. D.13*

2. Insert the Air Lift Performance strut into the vehicle. Install the upper mount washers and nuts (Figs. D.14 & D.15). Torque the nuts to 35Nm (26 lb.-ft.).



*fig. D.14*



*fig. D.15*

3. Insert the steering knuckle into the lower strut mount. Install the lower mount bolts (Figs. D.16 & D.17). Torque the bolts to 140Nm (103 lb.-ft.).

*fig. D.16**fig. D.17*

4. Insert the sway bar end link into the tab on the strut (Fig. D.18). Install the nut and torque to 84Nm (62 lb.-ft.).

*fig. D.18*

5. Reinstall the brake hose into the brake hose bracket with the retainer clip (Fig. D.19).

*fig. D.19*

6. Reinstall the ABS sensor wire into the retainer brackets on the lower strut mount (Fig. D.20).



*fig. D.20*

## ROUTING 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.
3. Reinstall the rear wheels (see torque specifications in *Table 1*).

## E. 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 strut mount nuts	35	26
Lower strut mount bolts	140	103
Sway bar end link nut	84	62
Wheel lugs	115	85
Fitting 1/4" PTC-1/4" FNPT	1 3/4 turns beyond hand tight	
Fitting 3/8" PTC-1/4" FNPT	1 3/4 turns beyond hand tight	
Leader line to air spring	1 3/4 turns beyond hand tight	

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure
<b>35-45 PSI (2.4-3.1BAR)</b>	<b>125 PSI (8.6BAR)</b>
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND <b>WILL VOID THE WARRANTY.</b>	

Table 2

### 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 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.

## 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 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 (Figs. E.1 & E.2) 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 in this kit is preset to "-18 clicks." This means that the damper is adjusted 18 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 2018 Nissan Altima.

For more information, refer to the User Guide.



fig. E.1



fig. E.2

# Notes

---

## 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](http://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](http://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](http://www.airliftperformance.com)

Printed in the USA  
JJC-0619

California: ⚠️ WARNING: Cancer and Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



# Kit 78681

Nissan L32

***Rear 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.*

## TABLE OF CONTENTS

<b>A. Introduction</b>	<b>2</b>
Notation Explanation	2
<b>B. Important Safety Notices</b>	<b>2</b>
<b>C. Installation Diagram</b>	<b>3</b>
Hardware List	3
<b>D. Installing the Air Suspension</b>	<b>4</b>
Removing the Stock Suspension	4
Installing the Kit Components	5
Routing the Air Lines	8
<b>E. Before Operating</b>	<b>8</b>
Setting the Ride Height	8
Torque Specifications	8
Suggested Driving Air Pressure	8
Maximum Air Pressure	8
Check for Binding	8
Installation Checklist	9
Damping Adjustment	9
<b>Limited Warranty and Return Policy</b>	<b>9</b>

## A. Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Nissan Altima L32. 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](http://www.airliftperformance.com).

An Air Lift Performance air management system is highly recommended for this product. Learn more at [air-lift.co/productlines](http://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

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

## B. Important Safety Notices



#### WARNING

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



#### CAUTION

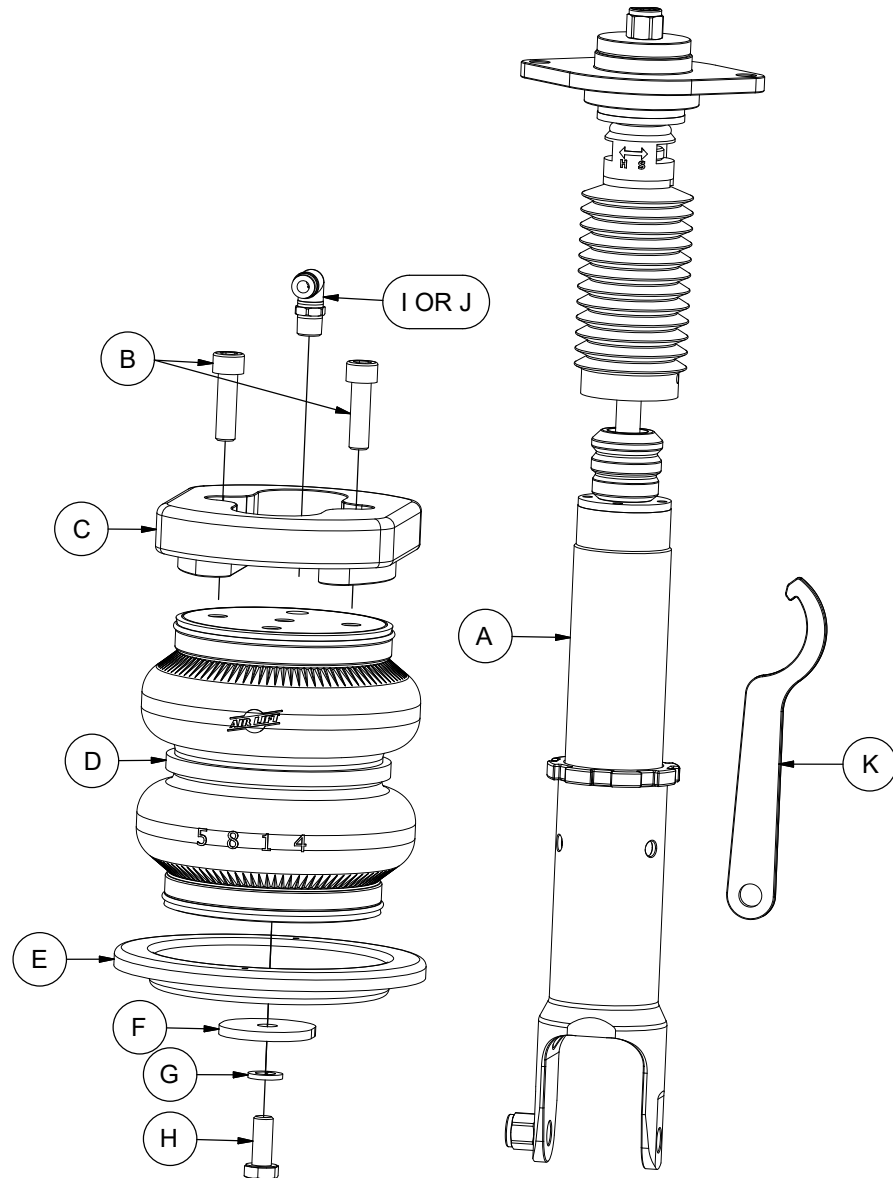
DO NOT WELD TO OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.



#### 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.

## C. Installation Diagram



### HARDWARE LIST

Item	Part #	Description .....	Qty
A	26624	Rear shock.....	2
B	17518	M10-1.5 x 35 Socket head cap screw.....	4
C	13330	Upper spacer .....	2
D	58550	Air spring .....	2
E	11801	Roll plate.....	2
F	13312	Lower centering spacer.....	2
G	18628	M10 Split lock washer .....	2
H	17517	M10-1.5 x 25 Hex cap screw .....	2
I	21779	1/4" MNPT x 1/4" PTC Elbow .....	2
J	21851	1/4" MNPT x 3/8" PTC Elbow .....	2
K	11289	M50 Spanner .....	1

fig. C.1



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

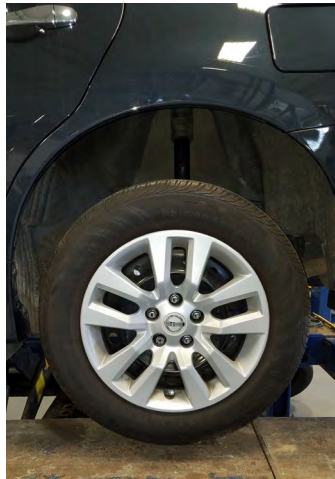
## D. Installing the Air Suspension

### NOTE

See "Important Safety Notices" on page 2.

### REMOVING THE STOCK SUSPENSION

1. Raise the vehicle and remove the wheel. Support the lower control arm with a jack (Figs. D.1 & D.2).



*fig. D.1*

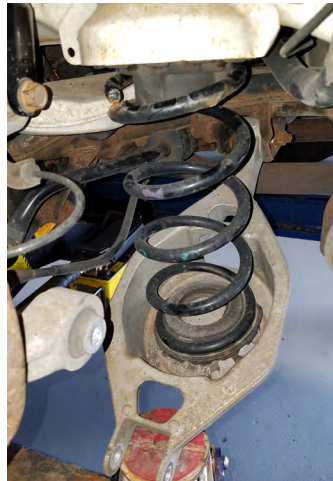


*fig. D.2*

2. Remove lower control arm outer pivot bolt. Lower the jack slowly to release tension from the coil spring. Remove the coil spring from the vehicle (Figs. D.3-D.5).



*fig. D.3*



*fig. D.4*

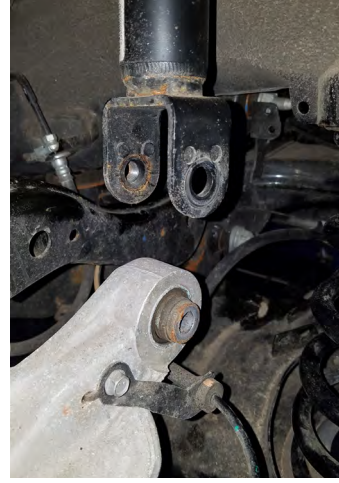


*fig. D.5*

3. Raise the control arm into position with the rear knuckle and reinstall the outer pivot bolt. Do not torque the outer pivot bolt at this time.
4. Remove the lower shock mount bolt (Figs. D.6 & D.7).



*fig. D.6*



*fig. D.7*

5. Remove upper shock mount nuts and remove the shock from the vehicle. Do not discard the nuts (Fig. D.8).



*fig. D.8*

### INSTALLING THE KIT COMPONENTS

1. Using the included centering spacer (F) as a template, mark and drill a 13/32" (.406") diameter hole in the lower control arm spring seat (Fig. D.9).



*fig. D.9*

2. Begin by applying thread sealant to the threads of the appropriate fitting (I or J). Tighten the fitting to the air spring upper end cap 1 3/4 turns beyond hand-tight (Fig. D.10).

*fig. D.10*

3. Install upper air spring spacer (C) with (2) socket head cap screws (B) (Fig. D.11). Torque the screws to 46Nm (34 lb.-ft.).

*fig. D.11*

4. Install the air spring assembly in the lower control arm. The air line should be routed and inserted into the fitting at this time (Fig. D.12).



Air line pointed  
rearward for ease  
of installation

*fig. D.12*

5. Using the hex cap screw (H), split lock washer (G), and lower centering spacer (F), bolt the air spring assembly to the lower control arm (Fig. D.13). Torque the bolt to 46Nm (34 lb.-ft.).



*fig. D.13*

6. Insert the Air Lift Performance rear shock (A) mounting into the chassis and install the previously removed nuts (Fig. D.14). Torque the nuts to 25Nm (18 lb.-ft.).

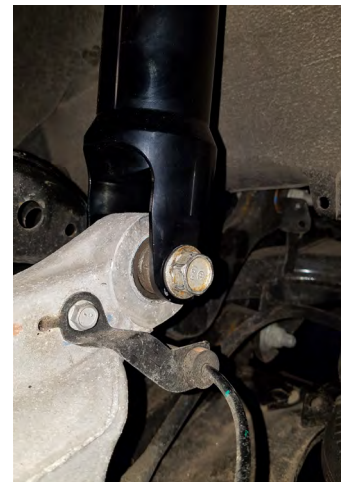


*fig. D.14*

7. Raise the jack until the lower mount of the Air Lift Performance shock is aligned with the bushing of the rear suspension knuckle. Install the lower shock mount bolt with the nylon locking nut included with the Air Lift Performance shock (Figs. D.15 & D.16). Torque the bolt to 110Nm (81 lb.-ft.).



*fig. D.15*



*fig. D.16*

## ROUTING 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.
3. Reinstall the rear wheels (see torque specifications in *Table 1*).

## E. 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.
Air spring upper spacer socket head screws	46	34
Centering spacer bolt	46	34
Upper shock mount nuts	25	18
Lower shock mount bolt	110	81
Lower control arm inner pivot bolt	169	125
Lower control arm outer pivot bolt	118	87
Rear wheel lugnuts	113	83

*Table 1*

Suggested Driving Air Pressure	Maximum Air Pressure
<b>45-55 PSI (3.1-3.8BAR)</b>	<b>125 PSI (8.6BAR)</b>
FAILURE TO MAINTAIN ADEQUATE MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD) MAY RESULT IN EXCESSIVE BOTTOMING OUT AND <b>WILL VOID THE WARRANTY.</b>	

*Table 2*

### 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 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.

## 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 (Figs. E.1 & E.2) 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 in this kit is preset to "-14 clicks." This means that the damper is adjusted 14 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 2007 Nissan Altima.

For more information, refer to the User Guide.



fig. E.1



fig. E.2

## 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](http://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](http://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](http://www.airliftperformance.com)

Printed in the USA  
JJC-0719

California: ⚠️ WARNING: Cancer and Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)