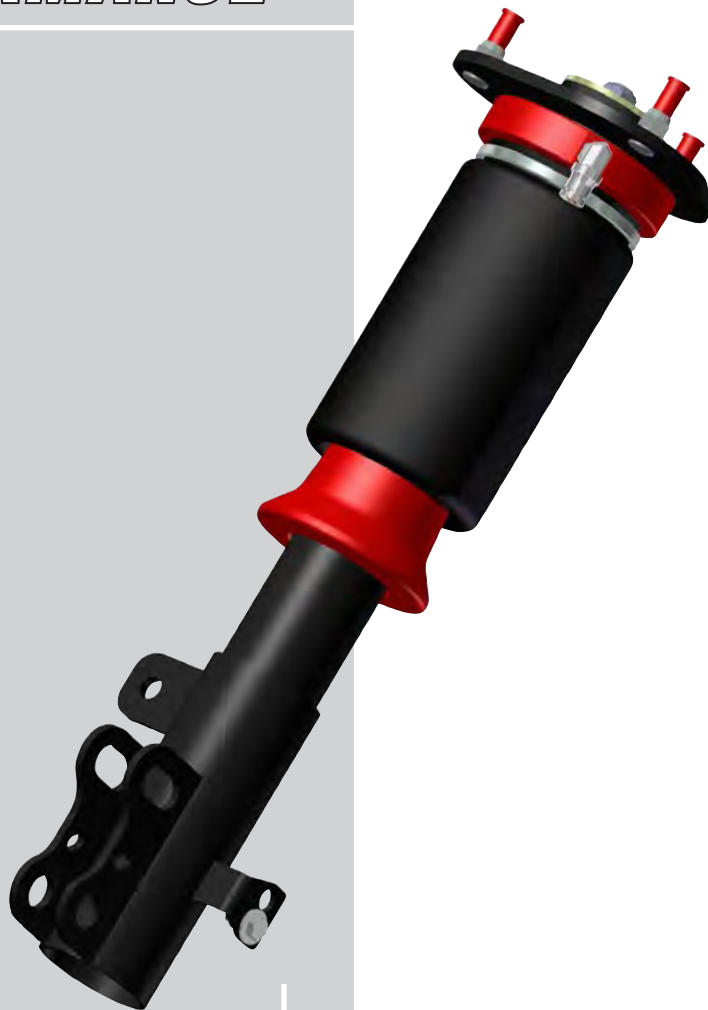


Air Lift™
PERFORMANCE

Kit 75599
2008 Scion xB



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

Introduction	2
Important Safety Notice	2
Notation Explanation	2
Installation Diagram	3
Hardware List	3
Tools List	3
Installing the Air Suspension	4
Preparing the Vehicle	4
Removing the Strut	4
Installing the New Strut Assembly	5
Aligning the Vehicle	6
Before Operating	7
Installation Checklist	7
Maintenance and Servicing	8
Minimum and Maximum Air Pressures	8
Maintaining and Operating	8
Replacement Information	8
Warranty and Returns Policy	9
Contact Information	9

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Scion Air Lift Performance kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information includes a hardware list, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

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 our website at www.airliftcompany.com.

IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the Base Curb Weight.

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.

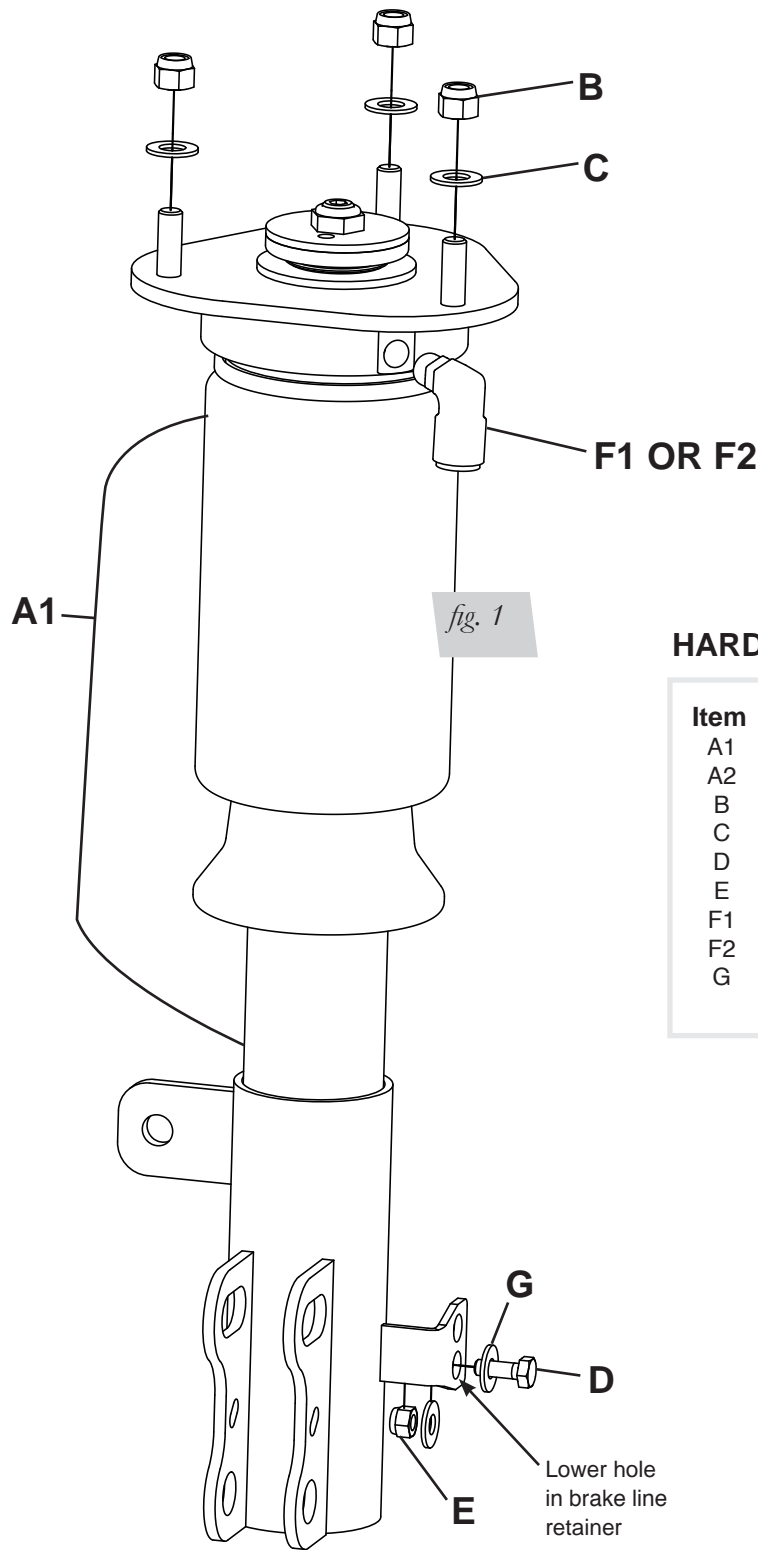
 **CAUTION**

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.

Installation Diagram



HARDWARE LIST

Item	Part #	Description	Qty
A1	35381	Gen II front strut (left).....	1
A2	35248	Gen II front strut (right, not shown)	1
B	18435	3/8"-16 Nyloc nut.....	6
C	18444	3/8" Flat washer	6
D	17175	1/4"-20 x .75 Bolt.....	2
E	18425	1/4"-20 Nyloc nut.....	2
F1	21779	Fitting - 1/4NPT X 1/4PTC, Elbow	2
F2	21851	Fitting - 1/4NPT X 3/8PTC, Elbow	2
G	18521	Flat washer	4

TOOLS LIST

Description.....	Qty
Jack	1
Jack stands or hoist.....	2
1/2" Drive ratchet.....	1
17mm Socket.....	1
12mm Wrench	1
14mm Wrench	1
19mm Wrench & socket	1
3/4" Socket	1
7/16" Socket & end wrench	1
Straight flathead screwdriver	1
Torque wrench.....	1
1/2" Socket & wrench	1



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 the vehicle and support the body with a hoist or jack stands.
2. Remove the front wheels.

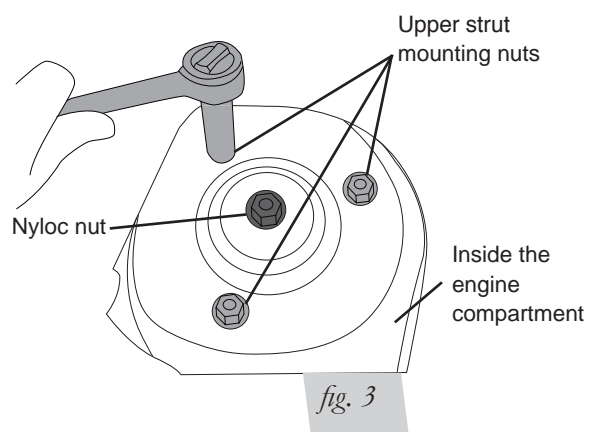
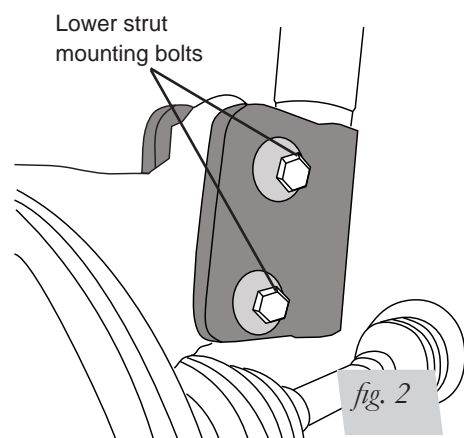
REMOVING THE STRUT

1. Remove the brake line and ABS retainer bolt; these will no longer be needed.
2. Unbolt the sway bar link from the strut.
3. Using a screwdriver, unclip the ABS line from the retainer.
4. Remove the two lower retaining bolts from the spindle and save for reinstallation (fig. 2).

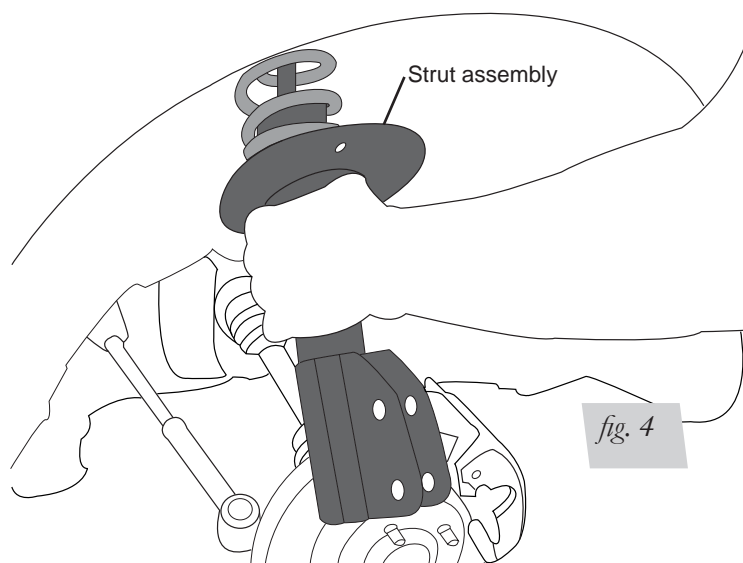
CAUTION

MAKE SURE TO SUPPORT THE LOWER SPINDLE/AXLE ASSEMBLY SO AS NOT TO PULL APART THE CV JOINT ON THE AXLE.

5. Remove the three upper retaining nuts; these will no longer be needed (fig. 3).



6. Remove the strut from the vehicle and discard (fig. 4).

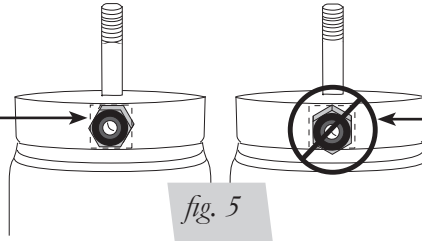


INSTALLING THE NEW STRUT ASSEMBLY

1. Prior to installing the strut, attach the air fitting provided to the threaded port at the top of the air spring (fig. 5). Seal with teflon tape.

Correct air fitting

installation: Hex nut edges are parallel with top and bottom upper end cap edges.



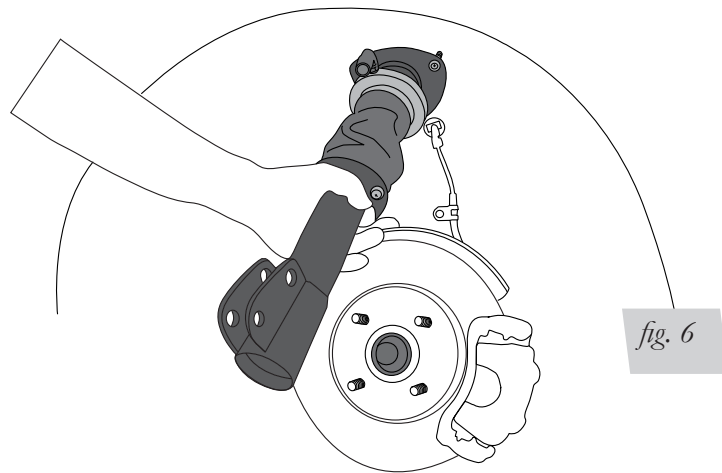
Incorrect air fitting

installation: Hex nut point extends over bottom of upper end cap edge and could puncture the air bag.

2. In each inner fender well, in the area surrounding the strut location, check for any screws longer than 1/4". Grind these screws down to less than 1/4".
3. Insert the new strut into the vehicle's strut pocket (fig. 6).

NOTE

Each strut is specific to one side of the vehicle only; the strut labeled 35381 fits on the left, driver-side of the vehicle; the other strut labeled 35248 fits on the right, passenger-side of the vehicle.



4. Secure the top of the strut in place using the 3/8" nyloc nuts (B), and washers (C) provided.

IMPORTANT: Torque to 27 ft/lbs.

5. Raise the suspension to align the lower strut mount holes with the spindle. Check the head-to-strut clearance. Reattach using the previously removed factory bolts.

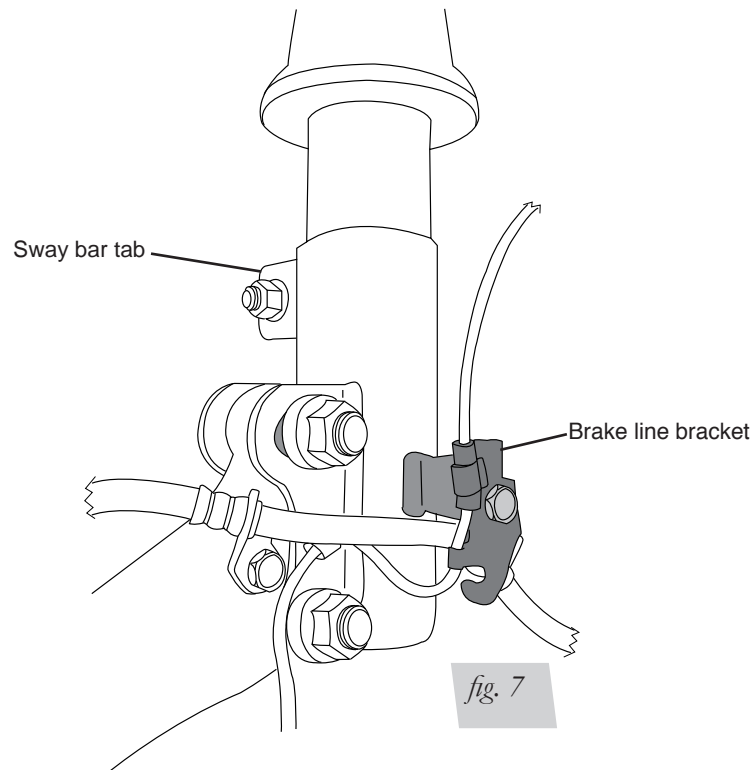
NOTE

When aligning, use of Loctite® Red or a similar thread sealant on the nut is recommended.

6. Reattach the ABS and brake lines using the 1/4" bolt (D), nyloc nut (E), and washers (G).

NOTE

Use the lower holes in the brake line bracket on the strut for reattaching the brake/ABS line (fig. 1 and fig. 7).



7. Reattach the sway bar using the original hardware (fig. 7).
8. Attach the air hose to the air fitting at the top of the strut.

ALIGNING THE VEHICLE

1. Using the control system, set the vehicle to the new custom ride height.
2. If the custom ride height is lower than stock, we recommend loosening all pivot points (bolts, nuts) on any control arm, strut arm or radius rod that contains bushings. Once they have been loosened, re-torque to stock specifications.

NOTE

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help unload the bushing to make it last longer at its new position based on the custom ride height.

CAUTION

KEEP SAFETY IN MIND WHEN DOING THIS AND SECURE ANY ITEMS THAT COULD COME LOOSE FROM THE VEHICLE.

3. The struts have slots built in for proper alignment at your new custom ride height. Have a four-corner alignment done from a qualified technician using the proper alignment tools.
4. Tighten all mounting hardware securely to the manufacturer's torque specifications.

Before Operating

1. The struts for this vehicle come with a nine-position dampening dial for added adjustability (fig. 8). Before driving your vehicle, set the new struts to their highest setting by turning the black dial on the shaft of the strut as far as it will go to the right (position 9).

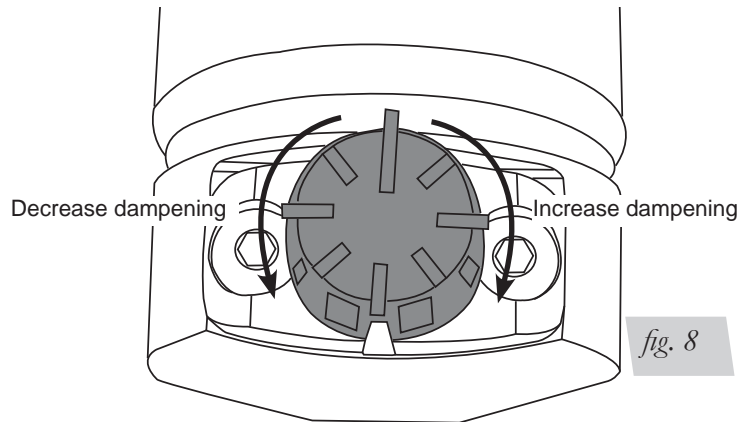


fig. 8

2. Next, completely deflate and reinflate the air bags 2-3 times to evenly distribute the air that may have shifted during shipping. For normal ride performance and the most versatility, EasyStreet recommends setting the strut dial to position 3.

CAUTION

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

3. Inflate and deflate the system (do not exceed 150 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.
4. Tighten and visually inspect all hardware after 100 miles.
5. Air Lift part #27669 or #27671, AutoPilot V2 Air Management System, is highly recommended for this product.
6. Please continue by reading the Maintenance and Servicing section (page 8).

INSTALLATION CHECKLIST

- Have all bolts been tightened?
- Is there clearance around all steering links and the air spring?
- Has the system been checked for leaks?
- Have all hoses been routed correctly, away from heat sources and secured in a way so they do not chafe on anything?
- Is a copy of the installation instructions in the vehicle for the customer?
- Has the vehicle been properly aligned?

Technician's Signature _____

Date _____

Maintenance and Servicing

1. Attach the air line as instructed in the manual included with your air management system (#27741 or #27630). To purchase an air management system, call Air Lift customer service at (800) 248-0892.

CAUTION

AIR LINES MUST BE ROUTED A MINIMUM OF 3 INCHES AWAY FROM ANY HEAT SOURCE.

2. Inflate and deflate system to check for clearance or binding issues.
3. Struts come with a nine-position dampening dial for added adjustability. Turning the dial clockwise increases dampening.
4. After installation, align the front end of the vehicle.
5. Tighten and visually inspect all hardware after 100 miles.

Minimum Air Pressure	Maximum Air Pressure
10 PSI	150 PSI
FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD), BOTTOMING OUT, OVER-EXTENSION, OR RUBBING AGAINST ANOTHER COMPONENT WILL VOID THE WARRANTY.	

MAINTAINING AND OPERATING

1. Always maintain ride height. Increase or decrease pressure from the system as necessary to attain ride height for optimal ride and handling. Never inflate the air spring beyond 150 PSI.

CAUTION

FOR YOUR SAFETY AND TO PREVENT DAMAGE TO YOUR VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR), AS INDICATED BY THE VEHICLE MANUFACTURER. CHECK YOUR VEHICLE'S OWNERS MANUAL AND DO NOT EXCEED THE MAXIMUM LOAD LISTED FOR YOUR VEHICLE.

3. Should it become necessary to raise the vehicle by the frame or do any service work, make sure the system is at minimum pressure (10 PSI) for safety and to reduce the tension on the suspension and brake components.

Replacement Information

If you need replacement parts, contact the local dealer or call Air Lift customer service at (800) 248-0892. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service at (800) 248-0892 first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Warranty and Returns Policy

Air Lift Company warrants the Performance line of products to the original purchaser against manufacturing defects one year from the date of purchase when used on cars and trucks as specified under normal operating conditions. The warranty does not apply to products that have been improperly applied, improperly installed, or which have not been maintained in accordance with installation instructions furnished with all products. The consumer will be responsible for removing (labor charges) the defective product from the vehicle and returning it, transportation costs prepaid, to the dealer from which it was purchased or to Air Lift Company for verification.

Air Lift will repair or replace, at its option, defective products or components. A minimum \$10.00 shipping and handling charge will apply to all warranty claims. Before returning any defective product, you must call Air Lift at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) for a Returned Materials Authorization (RMA) number. Returns to Air Lift can be sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917.

Product failures resulting from abnormal use or misuse are excluded from this warranty. The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages is not covered. The consumer is responsible for installation/reinstallation (labor charges) of the product. Air Lift Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights and you may also have other rights that may vary from state-to-state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages. The above limitation or exclusion may not apply to you. There are no warranties, expressed or implied including any implied warranties of merchantability and fitness, which extend beyond this warranty period. There are no warranties that extend beyond the description on the face hereof. Seller disclaims the implied warranty of merchantability. (Dated proof of purchase required.)

Contact Information

If you have any questions, comments or need technical assistance, contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 8 p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

For inquiries by mail, our address is PO Box 80167, Lansing, MI 48908-0167. Our shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

You may also contact us anytime by e-mail at sales@airliftcompany.com or on the web at www.airliftcompany.com.

Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 8 p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

**Register your warranty online at
www.airliftcompany.com/warranty**



Thank you for purchasing Air Lift Performance products!

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or PO Box 80167 • Lansing, MI 48908-0167
Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftcompany.com

Printed in
the USA

Air Lift ***PERFORMANCE***

Kit 75699
2008- Scion xB



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

Introduction	2
Important Safety Notice	2
Notation Explanation	2
Installation Diagram	3
Hardware List	3
Tools List	3
Installing the Air Lift Performance Kit	4
Getting Started	4
Assembling the Air Springs	4
Installing the Air Springs	4
Before Operating	7
Installation Checklist	7
Maintenance and Servicing	8
Minimum and Maximum Air Pressures	8
Maintaining and Operating	8
Replacement Information	8
Warranty and Returns Policy	9
Contact Information	9

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Scion Air Lift Performance kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information includes a hardware list, tool list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

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 our website at www.airliftcompany.com.

IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the Base Curb Weight.

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.

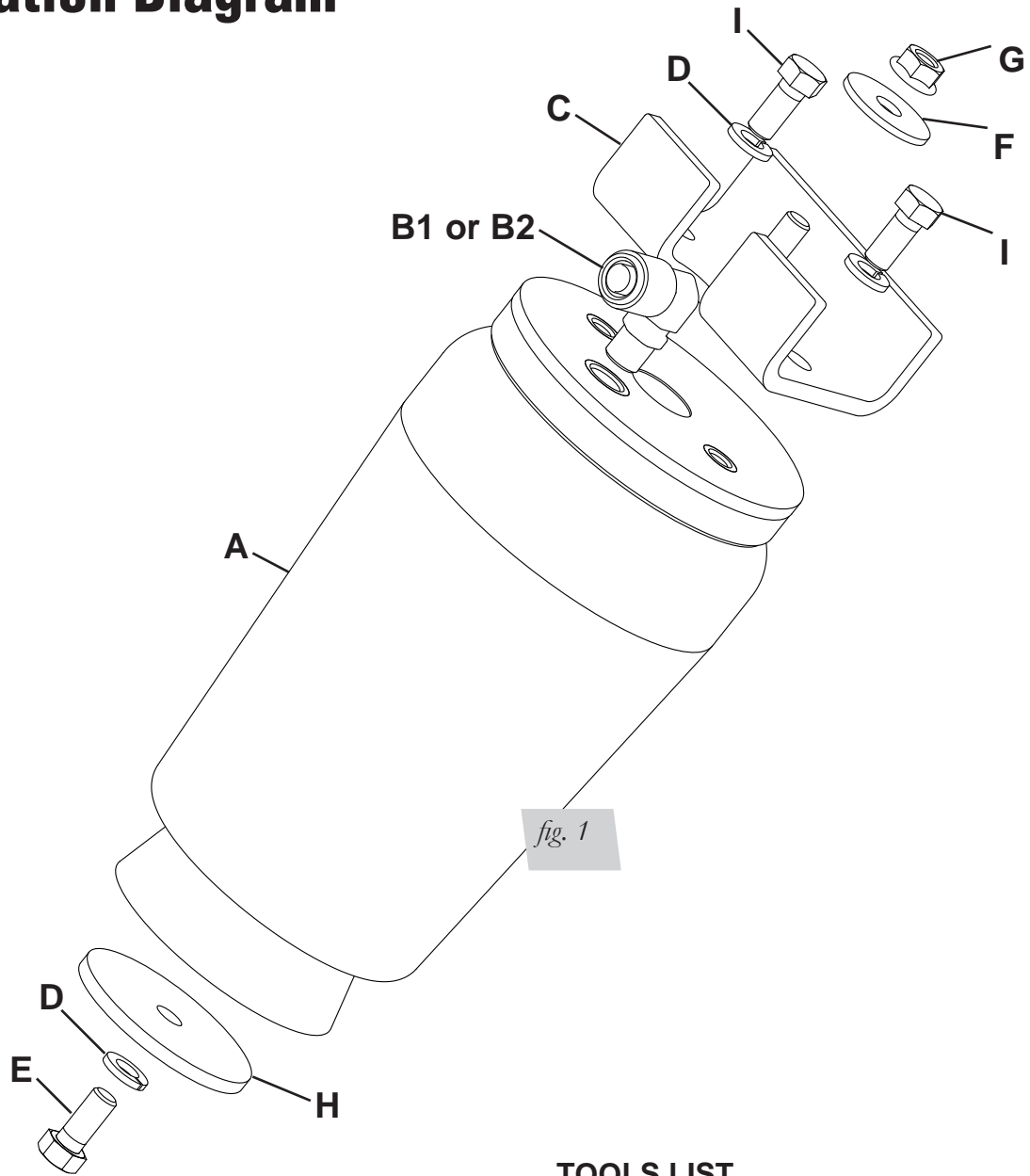
 **CAUTION**

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.

Installation Diagram



HARDWARE LIST

Item	Part #	Description	Qty
A	58130	Tapered sleeve	2
B1	21846	Fitting - 3/8NPT X 1/4PTC, Elbow	2
B2	21867	Fitting - 3/8NPT X 3/8PTC, Elbow	2
C	07245	Upper bracket	2
D	18427	3/8" Lock washer.....	6
E	17187	3/8"-16 x 7/8" Bolt	2
F	18447	3/8" Flat washer	2
G	18422	3/8" Flange nut.....	2
H	10956	2.75" Flat Washer	2
I	17203	3/8"-24 x 7/8" Bolt	4

TOOLS LIST

Description.....	Qty
Jack	1
Jack stands or hoist.....	2
1/2" Drive ratchet.....	1
17mm Socket.....	1
12mm Wrench	1
14mm Wrench	1
19mm Wrench & socket	1
3/4" Socket	1
7/16" Socket & end wrench	1
Straight flathead screwdriver	1
Torque wrench.....	1
1/2" Socket & wrench	1



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

Installing the Air Lift Performance Kit

GETTING STARTED

1. Raise the vehicle and support the frame with jack stands.

NOTE

It will be necessary to raise the vehicle high enough to remove the coil springs.

2. Remove the rear wheels.
3. Disconnect the lower shock mount and lower the suspension down low enough to remove the two coil springs.

CAUTION

DO NOT STRETCH THE BRAKE LINES DURING THIS PROCESS. IF NEEDED, DISCONNECT THE BRACKETS HOLDING THE BRAKE LINES.

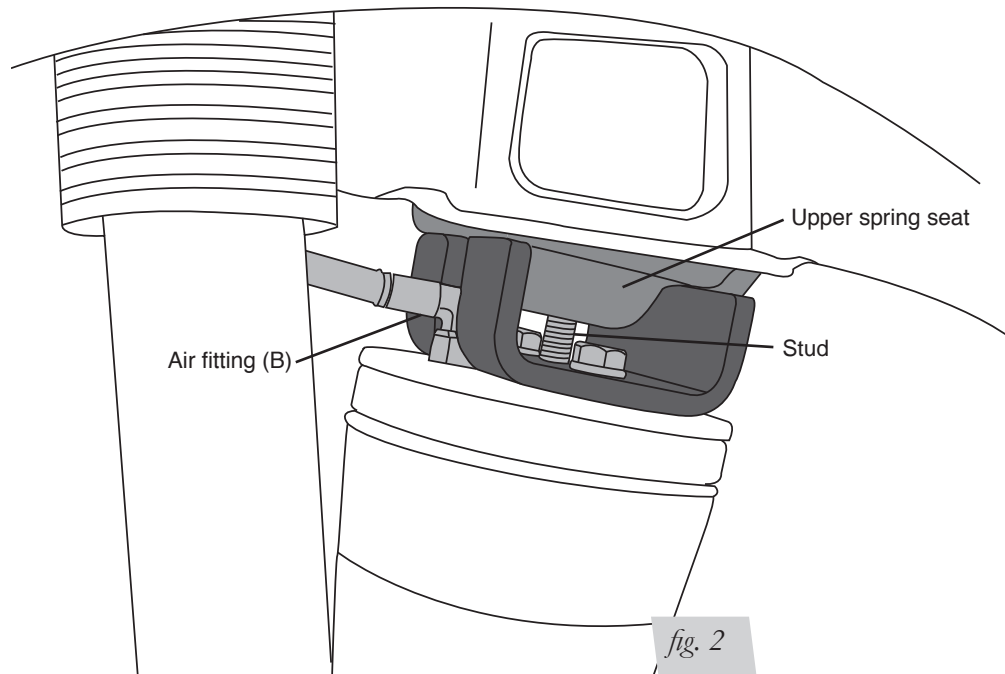
4. Remove the coil springs. Leave the suspension down for installing the air springs.

ASSEMBLING THE AIR SPRINGS

1. Install a 90° swivel air fitting (B1 or B2); tighten finger tight plus 1½ turns. Do not overtighten.
2. Attach the upper bracket (C) to the air spring using two 3/8" bolts (E) and lock washers (D) and tighten securely.

INSTALLING THE AIR SPRINGS

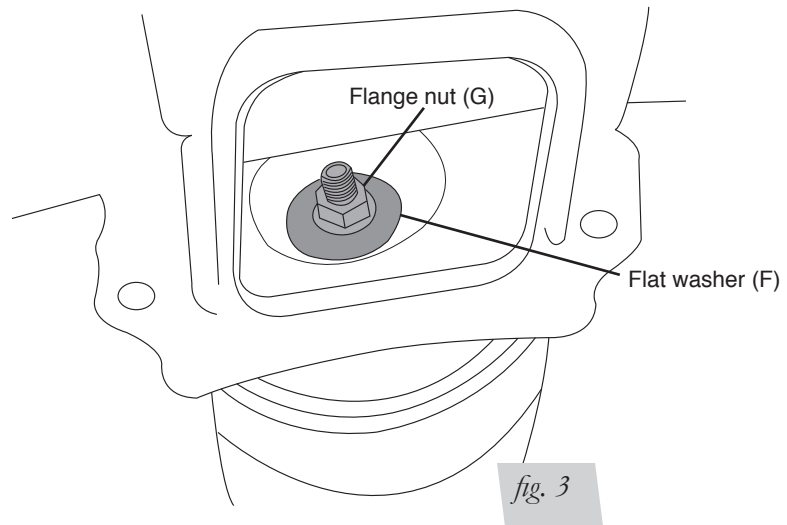
1. With the suspension still hanging from the coil spring removal, set the air springs in place onto the upper spring seat by inserting the stud on the top bracket into the hole on the upper spring seat with the air fitting pointing to the rear of the vehicle (fig. 2).



- From the window on the side of the frame, cap the stud with a large flat washer (F) and a 3/8" flange nut (G) (fig. 3). Tighten securely.

NOTE

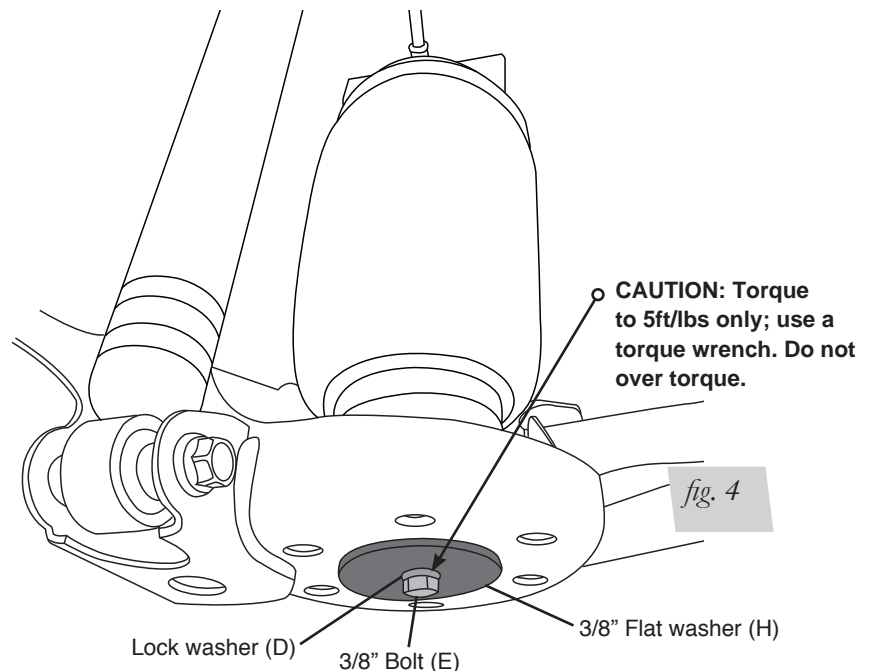
When tightening the nut, move around the bracket/spring assembly to center the flat washer in the pocket.



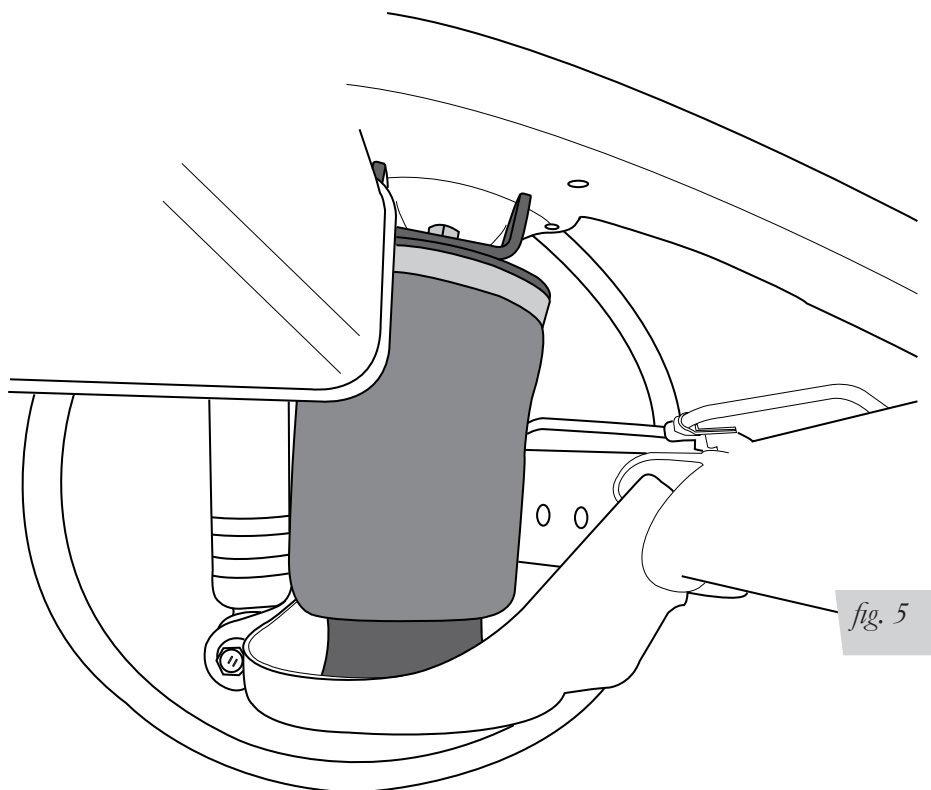
- Repeat for the other side.
- Raise the axle/cross member up far enough to come in contact with the piston on the lower air spring (fig. 4). Make sure the lower piston on the air spring indexes properly into the lower spring pocket hole.
- Cap with the 3/8" large flat washer (H), lock washer (D) and bolt (E) (fig. 4).

CAUTION

TORQUE TO 5 FT/LBS ONLY; USE A TORQUE WRENCH. IF TORQUED MORE THAN 5 FT/LBS, THE INSERT WILL PULL OUT OF THE LOWER PISTON WHICH MAY CAUSE THE PISTON TO COME OUT FROM ITS MOUNTING LOCATION CAUSING EVENTUAL FAILURE.

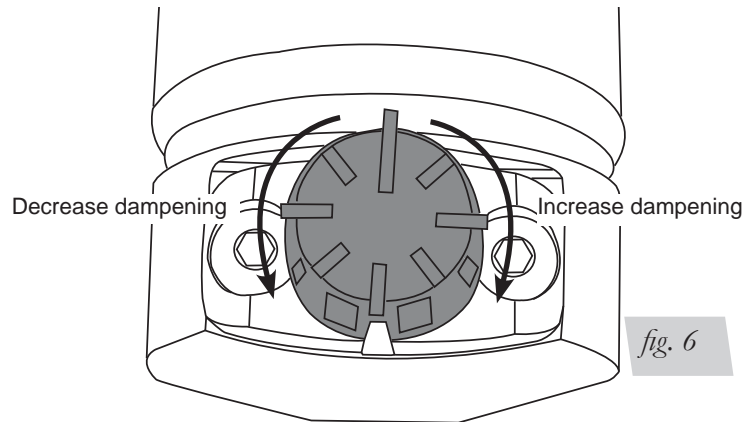


6. Raise the suspension back up and attach the shocks. Reinstall the tires.
7. Finished installation is shown below (fig. 5).



Before Operating

1. The struts for this vehicle come with a nine-position dampening dial for added adjustability (fig. 6). Before driving your vehicle, set the new struts to their highest setting by turning the black dial on the shaft of the strut as far as it will go to the right (position 9).



2. Next, completely deflate and reinflate the air bags 2-3 times to evenly distribute the air that may have shifted during shipping. For normal ride performance and the most versatility, LifeSTYLE recommends setting the strut dial to position 3.
3. Inflate and deflate the system (do not exceed 100 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.
4. Tighten and visually inspect all hardware after 100 miles.
5. Air Lift part #27669 or #27671, AutoPilot V2 Air Management System, is highly recommended for this product.
6. Please continue by reading the Maintenance and Servicing section (page 8).

INSTALLATION CHECKLIST

- Have all bolts been tightened?
- Is there clearance around all steering links and the air spring?
- Has the system been checked for leaks?
- Have all hoses been routed correctly, away from heat sources and secured in a way so they do not chafe on anything?
- Is a copy of the installation instructions in the vehicle for the customer?
- Has the vehicle been properly aligned?

Technician's Signature _____

Date _____

Maintenance and Servicing

1. Attach the air line as instructed in the manual included with your air management system (#27741 or #27630). To purchase an air management system, call Air Lift customer service at (800) 248-0892.

CAUTION

AIR LINES MUST BE ROUTED A MINIMUM OF 3 INCHES AWAY FROM ANY HEAT SOURCE.

2. Inflate and deflate system to check for clearance or binding issues.
3. Struts come with a nine-position dampening dial for added adjustability. Turning the dial clockwise increases dampening.
4. After installation, align the front end of the vehicle.
5. Tighten and visually inspect all hardware after 100 miles.

Minimum Air Pressure	Maximum Air Pressure
10 PSI	100 PSI
FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO LOAD), BOTTOMING OUT, OVER-EXTENSION, OR RUBBING AGAINST ANOTHER COMPONENT WILL VOID THE WARRANTY.	

MAINTAINING AND OPERATING

1. Always maintain ride height. Increase or decrease pressure from the system as necessary to attain ride height for optimal ride and handling. Never inflate the air spring beyond 150 PSI.

CAUTION

FOR YOUR SAFETY AND TO PREVENT DAMAGE TO YOUR VEHICLE, DO NOT EXCEED MAXIMUM GROSS VEHICLE WEIGHT RATING (GVWR), AS INDICATED BY THE VEHICLE MANUFACTURER. CHECK YOUR VEHICLE'S OWNERS MANUAL AND DO NOT EXCEED THE MAXIMUM LOAD LISTED FOR YOUR VEHICLE.

3. Should it become necessary to raise the vehicle by the frame or do any service work, make sure the system is at minimum pressure (10 PSI) for safety and to reduce the tension on the suspension and brake components.

Replacement Information

If you need replacement parts, contact the local dealer or call Air Lift customer service at (800) 248-0892. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service at (800) 248-0892 first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Warranty and Returns Policy

Air Lift Company warrants the performance line of products to the original purchaser against manufacturing defects one year from the date of purchase when used on cars and trucks as specified under normal operating conditions. The warranty does not apply to products that have been improperly applied, improperly installed, or which have not been maintained in accordance with installation instructions furnished with all products. The consumer will be responsible for removing (labor charges) the defective product from the vehicle and returning it, transportation costs prepaid, to the dealer from which it was purchased or to Air Lift Company for verification.

Air Lift will repair or replace, at its option, defective products or components. A minimum \$10.00 shipping and handling charge will apply to all warranty claims. Before returning any defective product, you must call Air Lift at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) for a Returned Materials Authorization (RMA) number. Returns to Air Lift can be sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917.

Product failures resulting from abnormal use or misuse are excluded from this warranty. The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages is not covered. The consumer is responsible for installation/reinstallation (labor charges) of the product. Air Lift Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights and you may also have other rights that may vary from state-to-state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages. The above limitation or exclusion may not apply to you. There are no warranties, expressed or implied including any implied warranties of merchantability and fitness, which extend beyond this warranty period. There are no warranties that extend beyond the description on the face hereof. Seller disclaims the implied warranty of merchantability. (Dated proof of purchase required.)

Contact Information

If you have any questions, comments or need technical assistance, contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 8p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

For inquiries by mail, our address is PO Box 80167, Lansing, MI 48908-0167. Our shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

You may also contact us anytime by e-mail at sales@airliftcompany.com or on the web at www.airliftcompany.com.

Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday, 8 a.m. to 8 p.m. Eastern Time. For calls from outside the USA or Canada, our local number is (517) 322-2144.

**Register your warranty online at
www.airliftcompany.com/warranty**



Thank you for purchasing Air Lift Performance products!

Air Lift Company • 2727 Snow Road • Lansing, MI 48917 or PO Box 80167 • Lansing, MI 48908-0167
Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftcompany.com

Printed in
the USA

Air Lift[™] **PERFORMANCE**

Kit 27666 Manual Air Management System



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

Introduction	2
Important Safety Notice	2
Notation Explanation	2
Hardware List	3
NPT Assembly Instructions	3
Helpful Tips: Air Line and Fittings	3
Installing the Air Management System	4
Install Components	4
Mounting the Switch Panel	5
Attaching the Air Lines	5
Troubleshooting Guide	6
Tuning the Air Pressure	7
Leak Testing and Detection	7
Installation Diagram	8-9
Warranty and Returns Policy	10
Replacement Information	11
Contact Information	11
Electrical Schematic	12
Paddle Switch Mounting Bracket Template	13
16380 Compressor Template	15

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of the Air Management System.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list, tool list, step-by-step installation information, maintenance guidelines and troubleshooting guide.

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 our website at www.airliftcompany.com.

IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the vehicle is designed to carry. Payload is GVWR minus the Base Curb Weight.

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.

Hardware List

Item	Part #	Description	Quantity	Item	Part #	Description	Quantity
A	16380	Viair 380C Compressor	1	Electrical			
B	11955	4 Gallon Aluminum Air Tank	1	S	24782	30/50A Relay	1
C	26228	Dual Needle Gauge	2	T	24608	10 Gauge Red Wire	15'
D	21703	Paddle Switch	4	U	24643	16 Gauge Red Wire	20'
E	11031	Paddle Switch Mounting Bracket	1	V	24644	16 Gauge Black Wire	10'
F	20946	1/4" Airline	80'	W	24537	Quick Splice	3
G	10530	Air Line Cutter	1	X	24568	18 Gauge Ring Terminal	2
H	24575	145 - 175 PSI Pressure Switch	1	Y	24594	Blue Female Spade Terminal	9
Paddle Switch Mounting Bracket Hardware				Z	24748	12 Gauge Ring Terminal 3/8" ID	1
I	17434	#8 x 3/4" Stainless Steel Screw	4	AA	24542	Fuse Tap	1
Tank Mounting Hardware				BB	24561	Mini Fuse Adapter	1
J	17188	3/8"-16 x 1.25" Grade 5 Bolt	4	CC	24649	Yellow Butt Connector	1
K	18444	3/8" Flat Washer	8	DD	24595	Yellow Female Spade Terminal	2
L	18435	3/8"-16 Nyloc Nut	4	EE	17263	1/4" x 1" Self Threading Screw	1
Tank Fittings				FF	24539	Fuse Holder	1
M	21737	3/8" Pipe Plug	1	GG	24547	30A Spade Fuse	1
N	21738	1/4" FNPT x 3/8" MNPT Bushing	1	HH	17132	1/2" Self Threading Screw	2
O	21779	1/4" NPT x 1/4" Tube Elbow	2	Gauge and Paddle Switch Fittings			
P	21610	1/8" FNPT x 1/4" MNPT Bushing	1	II	21838	1/4" Union Tee	4
Q	21633	Inflation Valve	1	JJ	21842	1/4" Y Tee	3
R	23586	Thread Sealant	1				



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

NPT ASSEMBLY INSTRUCTIONS

1. Inspect the port and fitting ensuring both are free of contaminants and excessive burrs and nicks.
2. Apply a stripe of liquid pipe sealant around the male threads leaving the first two threads uncovered.
3. Screw finger tight into the port.
4. Wrench tighten the fitting to the correct turns past finger tight position (see table 1).



NEVER BACK OFF AN INSTALLED PIPE FITTING TO ACHIEVE PROPER ALIGNMENT. LOOSENING INSTALLED PIPE FITTINGS WILL CORRUPT THE SEAL AND CONTRIBUTE TO LEAKAGE AND FAILURE.

Torque Specifications		
Fitting Size	Turns Past Finger Tight	Torque lb/ft
1/8" NPT	1.5 - 3.0	12
1/4" NPT	1.5 - 3.0	25
3/8" NPT	1.5 - 3.0	40
1/2" NPT	1.5 - 3.0	54
3/4" NPT	1.5 - 3.0	78
1" NPT	1 - 2.5	112
1 1/4" NPT	1 - 2.5	154
1 1/2" NPT	1 - 2.5	211
2" NPT	1 - 2.5	300

Table 1

HELPFUL TIPS: AIR LINE AND FITTINGS

1. Minimum hose bend radius
 - 1/4" hose = 1" hose bend radius.
2. Hose to fitting
 - No side loading on fitting from hose.
 - Hose straight for 1" before bending.
3. Hose cutting
 - Cut hose perpendicular to hose length.
 - Inspect hose for scratches that run lengthwise on hose prior to insertion.
 - Use proper hose cutter, cigar cutter, or razor on flat surface.
4. DOT/SAEJ844 air brake hose data
 - Maximum working pressure of 175 PSI.
 - Not to be used for frame (body) to un-sprung mass connection, use a braided leader hose for this moving connection.

Compressor Tank Pressure		
Viair	Air Lift P/N	Max. Tank Pressure
380C	16380	175
400C	16400	150
444C	16444	175
450C	16450	150

Table 2

Installing the Air Management System

INSTALL COMPONENTS

NOTE

For a complete schematic, please see fig. 1. (pages 8 – 9)

Layout

1. Plan component location first.
2. Prior to mounting components, check to make sure:
 - the compressor leader hose will reach the tank.
 - the plumbing will route cleanly through the vehicle.

NOTE

Be sure to install all components as far as possible from any heat sources. Plan and prepare wiring and plumbing routing thru the vehicle. Eliminate all sharp edges that could chafe. Use grommets when passing through compartment walls.

Prepare and install the compressor

1. Prepare the compressor intake. If inside the vehicle, attach filter to port on end of compressor (fig. 1). If the compressor is located outside the vehicle, snorkel inlet filter to a dry location inside vehicle using components supplied with the compressor.
2. Center punch and drill four holes using the template on page 15.
3. Attach using the hardware supplied with the compressor.

NOTE

Air compressors ingest moisture and will deposit water in the tank. Tanks must be regularly purged to eliminate the possibility of water freezing inside the system or causing corrosion. Be sure to provide easy access to drain/fill valve (preferably outside the vehicle). The system does not include moisture separators or water traps, and does require periodic tank moisture drain. If using an engine driven compressor, proper oil and water filtration must be added as these compressors will contaminate the air suspension system. Water traps are available and sold separately through Air Lift Performance, part numbers: 21011 (1/4"), 21012 (3/8"), 21013 (1/2").

Tank pre-assembly (see fig. 1)

1. Determine tank location and orientation prior to installing fittings.
2. Apply thread sealant as necessary to all fittings.
3. Install the drain/fill PTC fitting in the lower most tank threaded port.
4. Choose a tank threaded port for the compressor fitting.
5. Choose the highest tank threaded port for air line supply.
6. Plug any remaining tank ports with hex plugs.

Tank install (see fig. 1)

1. Using the tank feet as a template, drill holes for hardware assembly.
2. Attach the tank using the supplied hardware.
3. Cut an appropriate length of hose from the manifold port T, to the PTC fitting on the tank.
4. Route the drain/fill air line with a schrader valve (preferably outside the vehicle).

NOTE

When cutting plastic air line, only use a standard hose cutter like (Air Lift part number 10530) or razorblade. Cut all hose ends square and as smoothly as possible. See hose cutting tips on page 4.

MOUNTING THE SWITCH PANEL

Refer to the switch panel template on page 13.

1. Find a location to mount the paddle switch mounting bracket (E).
2. Snap all four paddle switches (D) into the paddle switch mounting bracket (E) so the DEL is toward the top.

NOTE

You may select different locations for the paddle switches. The paddle switches do not need to be used with the supplied paddle switch mounting bracket.

3. Cut six pieces of air line (F) the same length (approximately 3"-6").
4. Push four of these pieces onto the "SUP" port of the switch. Attach two Y fittings (JJ) to the air lines.
5. Push the other two pieces of line into the Y fittings (JJ).
6. Attach the last Y fitting (JJ) to the air lines.
7. Mount the paddle switch mounting bracket (E) with four screws (I).

ATTACHING THE AIR LINES

CAUTION

WHEN CUTTING OR TRIMMING THE AIR LINE, USE AN AIR LINE CUTTER (G), A RAZOR BLADE OR A SHARP KNIFE. A CLEAN, SQUARE CUT WILL ENSURE AGAINST LEAKS. DO NOT USE WIRE CUTTERS OR SCISSORS TO CUT THE AIR LINE. THESE TOOLS MAY FLATTEN OR CRIMP THE AIR LINE, CAUSING IT TO LEAK.

1. Run a length of air line (F) from the air fitting on the compressor to the end of the switch cluster.
2. Run a length of air line from the remaining air fittings on the switch to its respective air spring.
3. Repeat step 2 for the remaining air fittings and air springs.
4. Use a tee and connect into each one of the air spring lines to connect to its respective gauge port.
5. Test and make sure that the switches operate the appropriate air springs.

Troubleshooting Guide

For further technical assistance please contact our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, our local number is (517) 322-2144.

PROBLEM	CAUSE	SOLUTION
<i>Compressor doesn't run</i>	There is a blown fuse or relay, bad ground, or poor electrical connections.	Replace the fuse, check the ground wire, or check the compressor connector
<i>Compressor runs all the time.</i>	The compressor relay is defective or there is a leak.	Replace the relay or locate the leak and repair.
<i>Air spring or tank leak.</i>	Fitting seal or air line is compromised.	Check to make sure air lines are seated in connectors. Inspect fittings with soapy water. Trim hose or re-seal fitting.
<i>Compressors runs all the time but doesn't fill the tank.</i>	Compressor in-line check valve fitting has been overtorqued.	Loosen fitting and check again. Replace if needed.

Tuning the Air Pressure

Pressure determination comes down to three things — level vehicle, ride comfort, and stability.

1. Level vehicle

If the vehicle's headlights are shining into the trees or the vehicle is leaning to one side, then it is not level. Raise the air pressure to correct either of these problems and level the vehicle.

2. Ride comfort

If the vehicle has a rough or harsh ride it may be due to either too much pressure or not enough. Try different pressures to determine the best ride comfort.

3. Stability

Stability translates into safety and should be the priority, meaning the driver may need to sacrifice a perfectly level and comfortable ride. Stability issues include roll control, bounce, dive during braking and sponginess. Tuning out these problems usually requires an increase in pressure.

Leak Testing and Detection

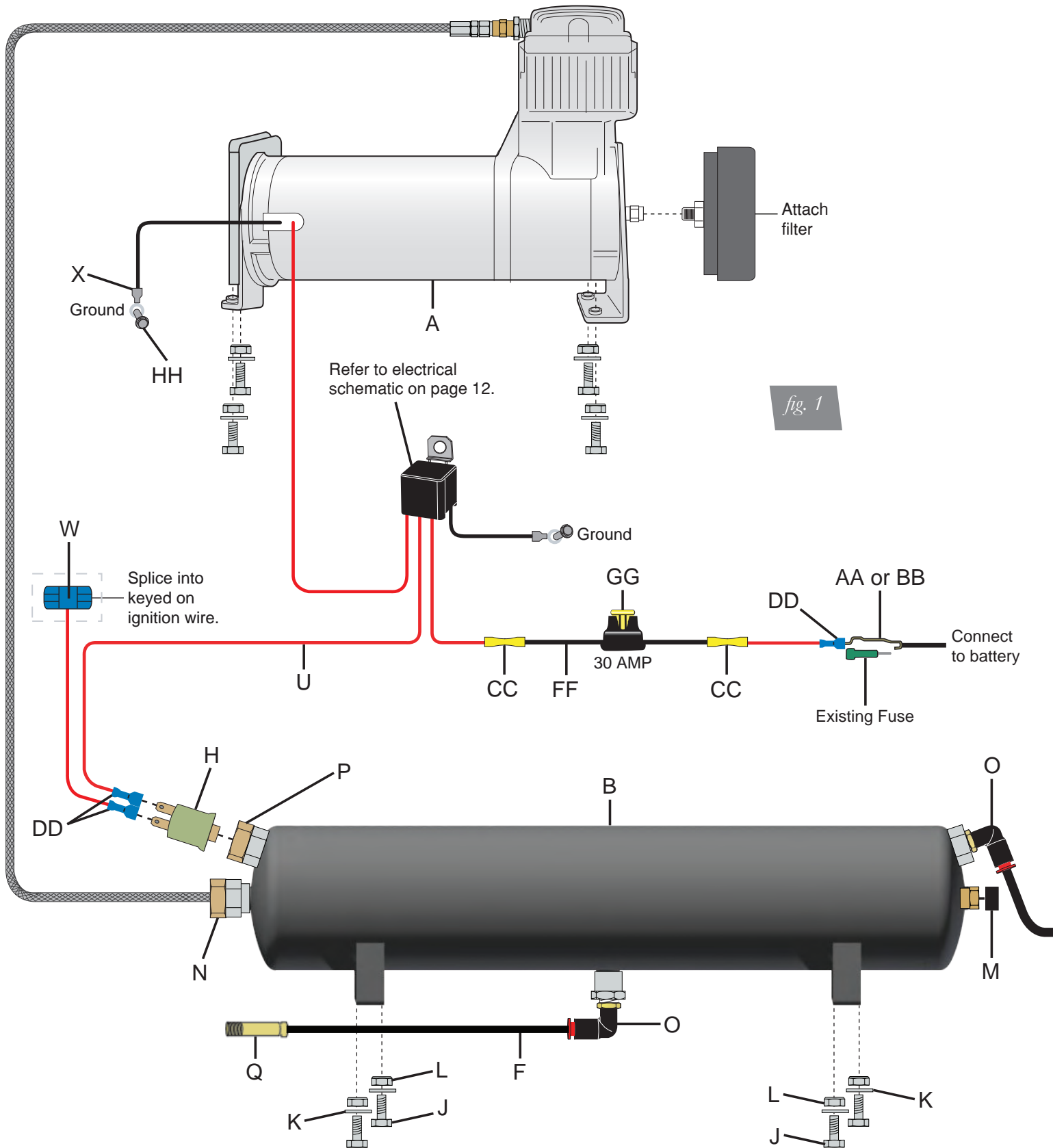
Leak detection

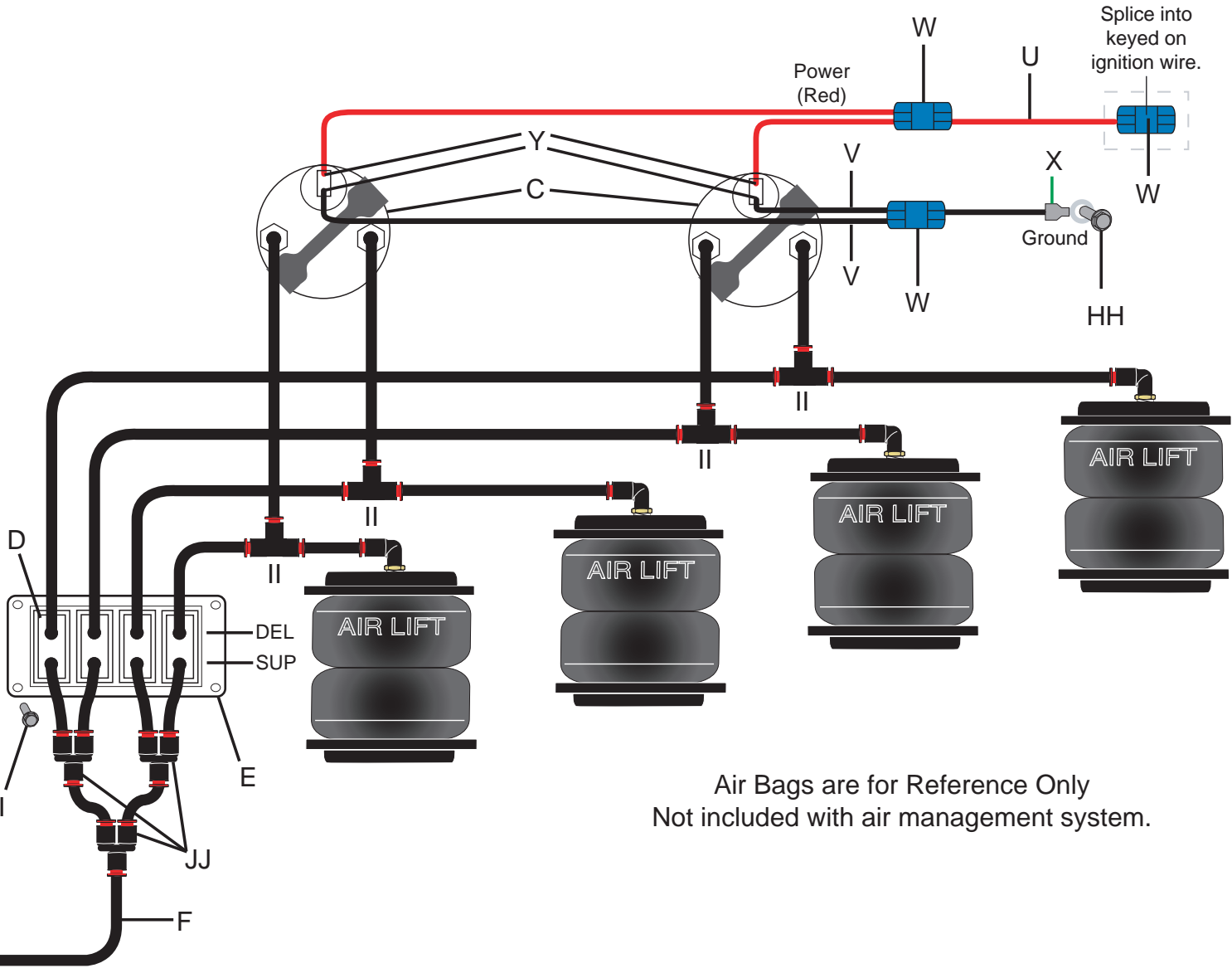
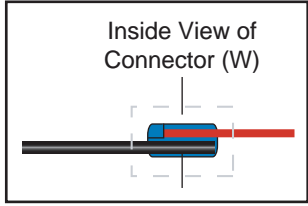
1. A leak can be defined as a loss of pressure of more than 5 psi over an 8 hour period. Be aware that ambient temperature change has an effect on pressure that may seem like a leak. For example: a change of 10° Fahrenheit up or down from your baseline will have an approximate gain or loss of indicated pressure of 2 psi. If a leak is suspected after including any temperature change, then proceed to #2.
2. Spray soapy water (1/5 Dawn brand dish soap to 4/5 water) on suspect fittings and hose connections and look for any bubbling caused by air leakage.
3. Fix leaking connection (review pages 3 and 4 for help on NPT fittings and air line connections).
4. Wipe down sprayed connections with rag to remove any residual soapy water.

NOTE

Dawn brand dish soap will not corrode the metals (aluminum, brass, steel) with which it comes into contact.

Installation Diagram





Air Bags are for Reference Only
Not included with air management system.

NOTE: Air Lift recommends using a hose cutting tool to ensure a proper cut. If a hose connection has been disconnected the hose must be trimmed 1/2" back to provide for a leak free seal.

Warranty and Returns Policy

Air Lift Company warrants its products, for the time periods listed below, to the original retail purchaser against manufacturing defects when used on catalog-listed applications on cars, vans, light trucks and motorhomes under normal operating conditions for as long as Air Lift manufactures the product. The warranty does not apply to products that have been improperly applied, improperly installed, used in racing or off-road applications, used for commercial purposes, or which have not been maintained in accordance with installation instructions furnished with all products. The consumer will be responsible for removing (labor charges) the defective product from the vehicle and returning it, transportation costs prepaid, to the dealer from which it was purchased or to Air Lift Company for verification.

Air Lift will repair or replace, at its option, defective products or components. A minimum \$10.00 shipping and handling charge will apply to all warranty claims. Before returning any defective product, you must call Air Lift at (800) 248-0892 in the U.S. and Canada (elsewhere, (517) 322-2144) for a Returned Materials Authorization (RMA) number. Returns to Air Lift can be sent to: Air Lift Company • 2727 Snow Road • Lansing, MI • 48917.

Product failures resulting from abnormal use or misuse are excluded from this warranty. The loss of use of the product, loss of time, inconvenience, commercial loss or consequential damages is not covered. The consumer is responsible for installation/reinstallation (labor charges) of the product. Air Lift Company reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty gives you specific legal rights and you may also have other rights that vary from state-to-state. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages. The above limitation or exclusion may not apply to you. There are no warranties, expressed or implied including any implied warranties of merchantability and fitness, which extend beyond this warranty period. There are no warranties that extend beyond the description on the face hereof. Seller disclaims the implied warranty of merchantability. (Dated proof of purchase required.)

Air Lift 1000™	Lifetime Limited	LoadController/Dual™	2 Year Limited
RideControl™	Lifetime Limited	Load Controller™ (I)	2 Year Limited
LoadLifter 5000™*	Lifetime Limited	Load Controller™ (II)	2 Year Limited
SlamAir™	Lifetime Limited	SmartAir™	2 Year Limited
AirCell™	Lifetime Limited	Wireless AIR™	2 Year Limited
Air Lift Performance™**	1 Year Limited	WirelessONE™	2 Year Limited
LoadController/Single™ ..	2 Year Limited	Other Accessories	2 Year Limited

**formerly SuperDuty*

***formerly LifeStyle & Performance and Easystreet*

Replacement Information

If you need replacement parts, contact the local dealer or call Air Lift customer service at (800) 248-0892. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service at (800) 248-0892 first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Contact Information

If you have any questions, comments or need technical assistance contact our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, our local number is (517) 322-2144.

For inquiries by mail, our address is PO Box 80167, Lansing, MI 48908-0167. Our shipping address for returns is 2727 Snow Road, Lansing, MI 48917.

You may also contact us anytime by e-mail at sales@airliftcompany.com or on the web at www.airliftcompany.com.

Electrical Schematic

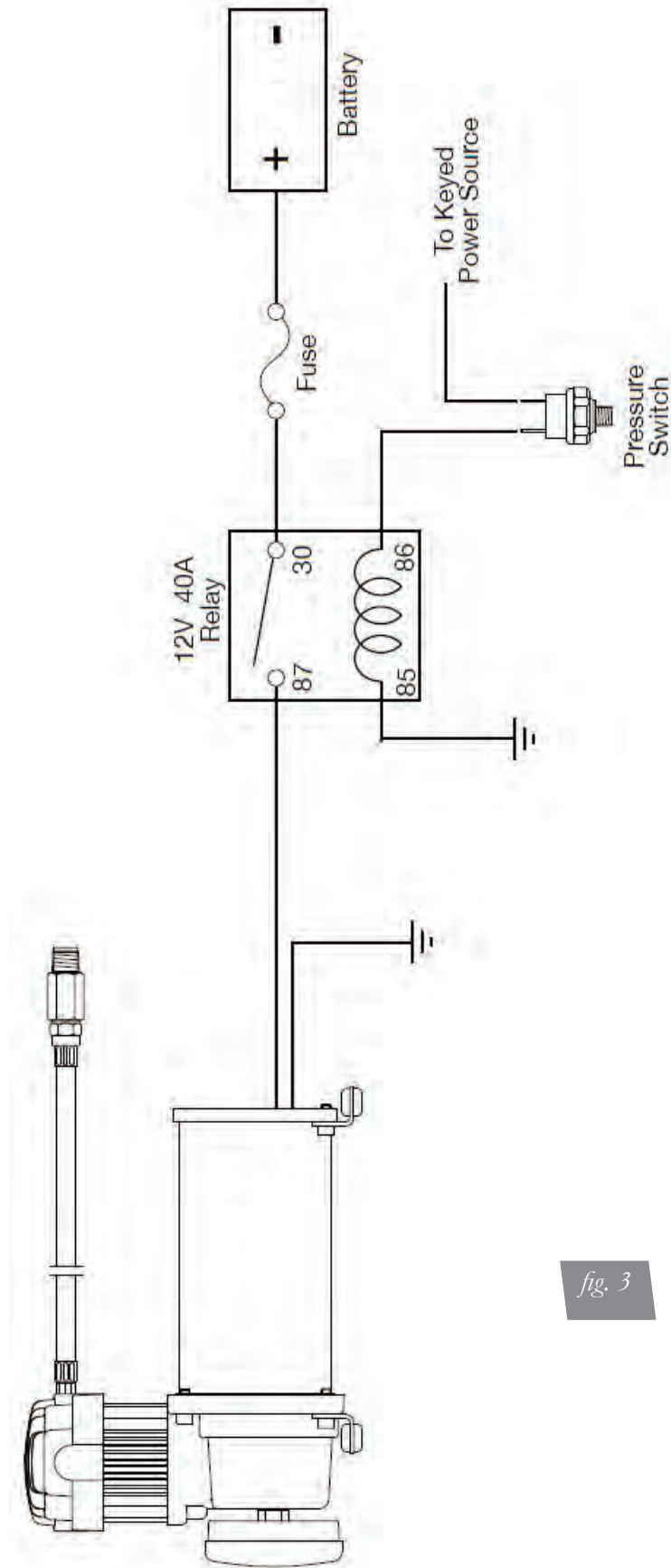
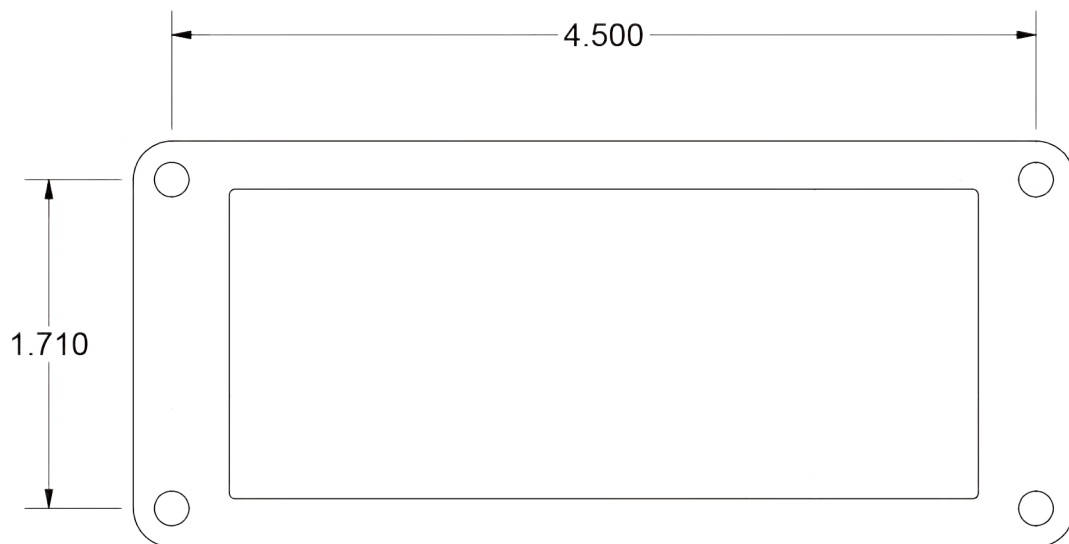
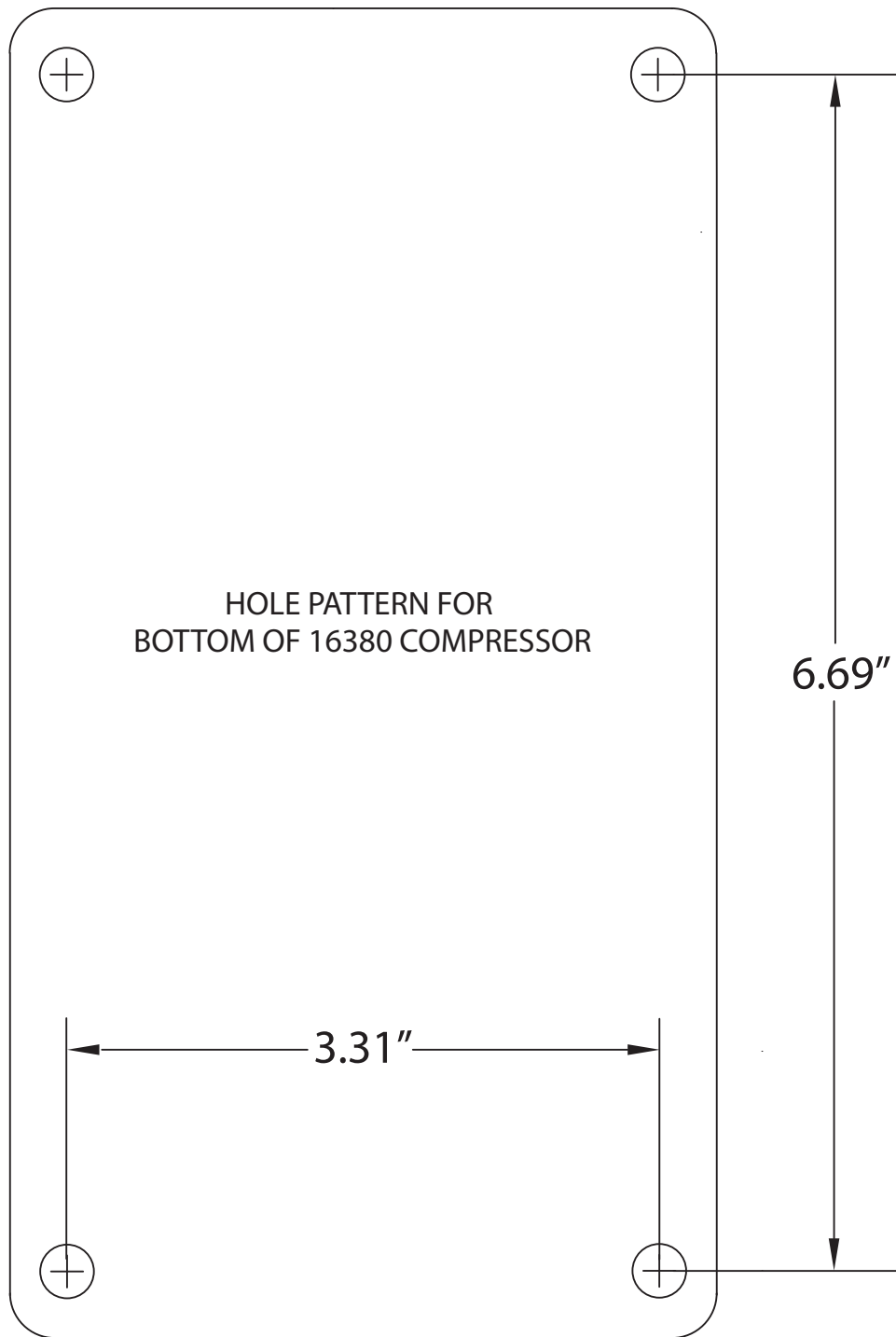


fig. 3

Paddle Switch Mounting Bracket Template



16380 Compressor Template



Need Help?

Contact our customer service department by calling (800) 248-0892, Monday through Friday. For calls from outside the USA or Canada, our local number is (517) 322-2144.



Thank you for purchasing Air Lift Performance products!

Air Lift Performance • 2727 Snow Road • Lansing, MI 48917 or PO Box 80167 • Lansing, MI 48908-0167
Toll Free (800) 248-0892 • Local (517) 322-2144 • Fax (517) 322-0240 • www.airliftperformance.com

Printed in
the USA