



## INSTALLATION GUIDE



# FORD MUSTANG (S197)

**REAR APPLICATION**

**Kit 76515**

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.*

# **Protect your Air Lift Performance Purchase by Completing your Warranty Registration**



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QR code to complete your online warranty registration.

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# Introduction

Air Lift Performance thanks you for purchasing the most complete, fully engineered high-performance air suspension made for the Ford Mustang (S197). 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](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 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

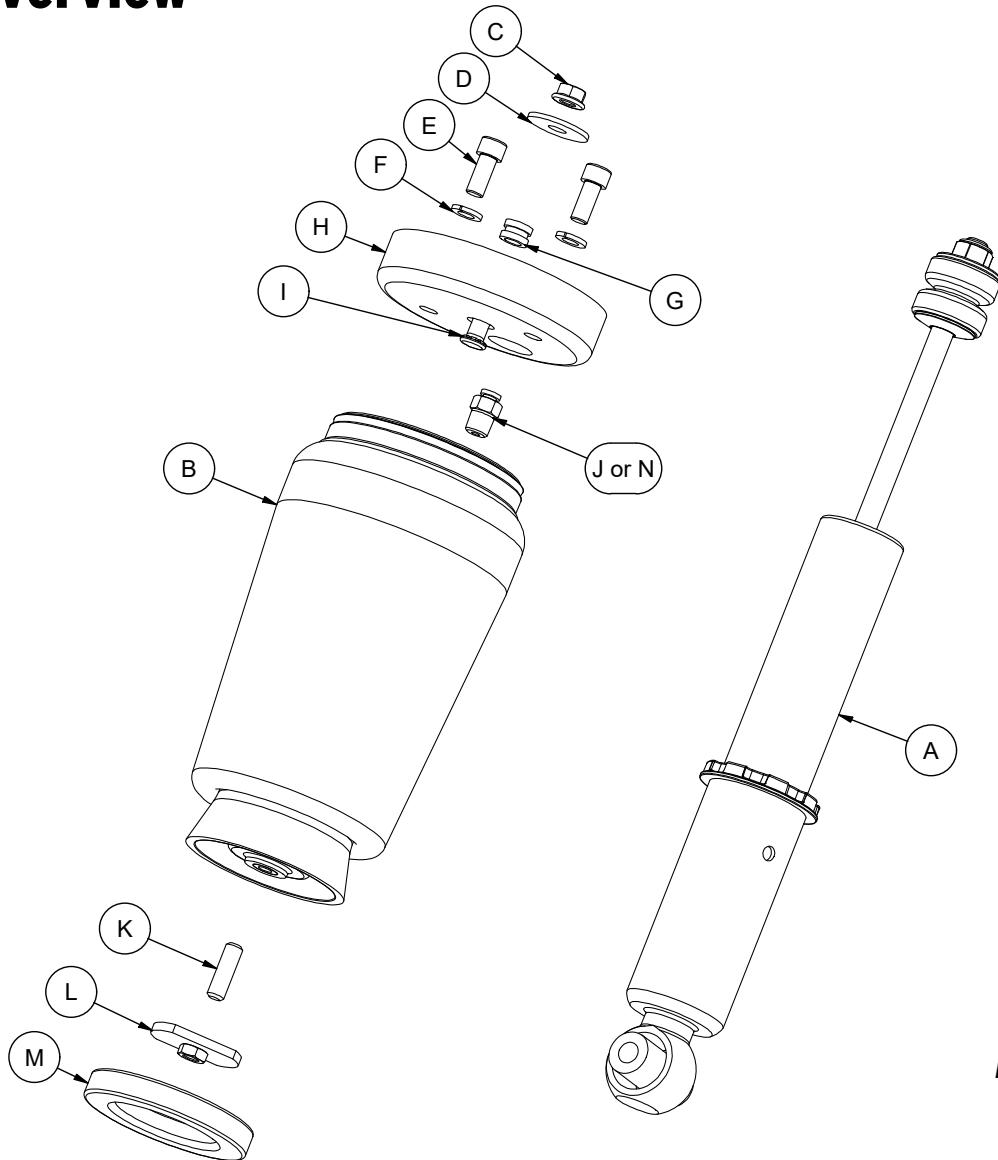


Fig. 1

## HARDWARE CONTENT

Item	Part #	Description	Qty	Item	Part #	Description	Qty
A	39152	SHOCK, FORD S197, REAR	2	I	17448	3/8-16 X 1.75 STUD (HCH-616-28)	2
B	58130 B	TAPERED SLEEVE	2	J	21745	1/4" MNPT X 1/4" PTC STRAIGHT FITTING	2
C	18422	3/8" FLANGE NUT	2	K	17447	3/8-16 X 1.25 THREADED ROD	2
D	18447	FLAT WASHER, 3/8" ID 13/8" OD	2	L	10814 A	CLAMP PLATE	2
E	17471	3/8-16 x .875 HSHCS	4	M	13252 B	SPACER, TAPERED AIR SPRING	2
F	18427	3/8" LOCK WASHER	4	N	21853	1/4" MNPT X 3/8" PTC STRAIGHT FITTING	2
G	10853	GROMMET, 3/8" ID X 5/8" OD	2				
H	11045 E	CUP, UPPER SPRING (MUSTANG S-197)	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. Support vehicle with jack stands or a hoist at approved lifting points. Support the axle at maximum extension.

## SECTION 2. / STOCK SUSPENSION REMOVAL

1. Disconnect the stabilizer bar from the chassis (Fig. 2).

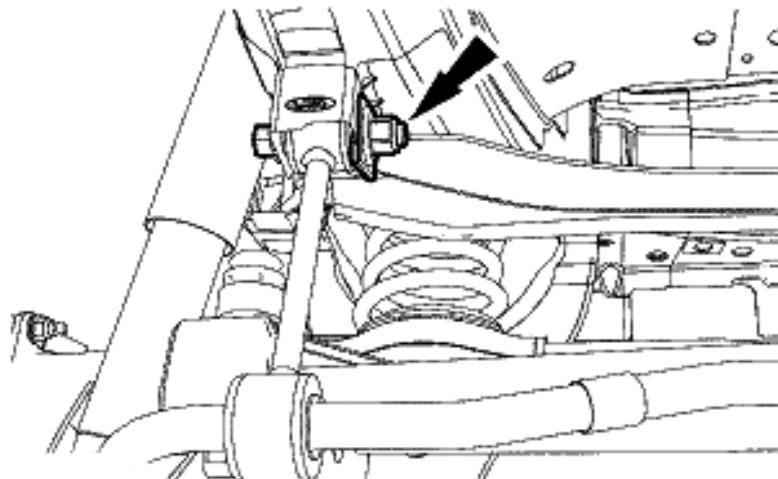


Fig. 2

2. For Convertible Models:  
Disconnect the chassis support bracing that is underneath the axle (Fig. 3).

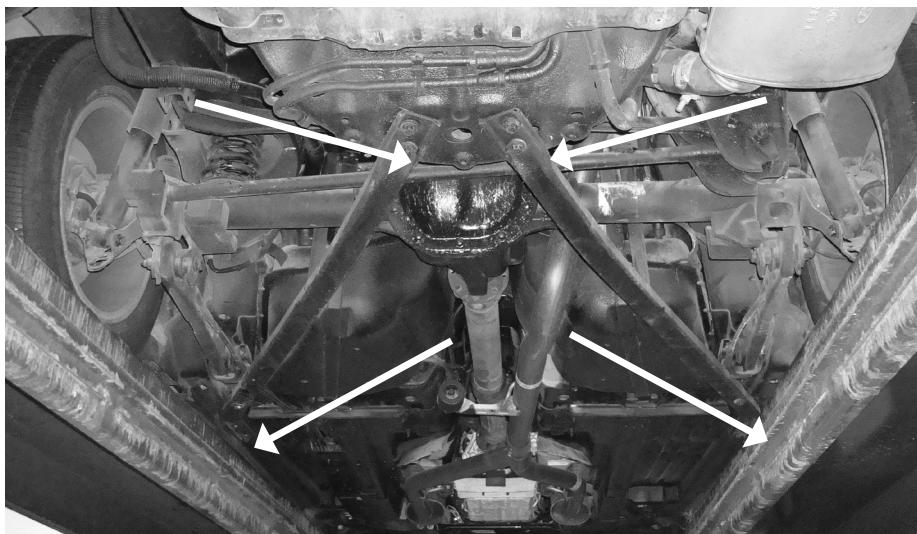


Fig. 3

3. With the axle supported, remove the lower shock bolts (Fig. 4).

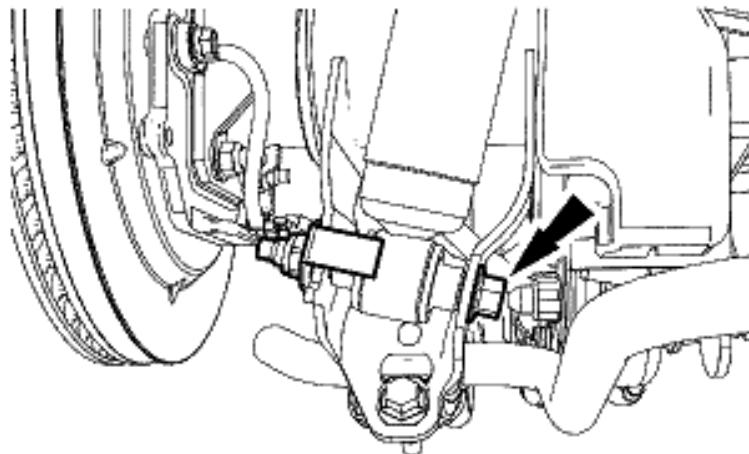


Fig. 4

4. Lower the axle until the coil spring can be removed.

**CAUTION**

DO NOT HANG THE AXLE FROM THE DRIVESHAFT. OVEREXTENSION OF THE DRIVESHAFT CAN CAUSE DAMAGE.

5. Remove the coil spring and rubber isolators (Fig. 5).

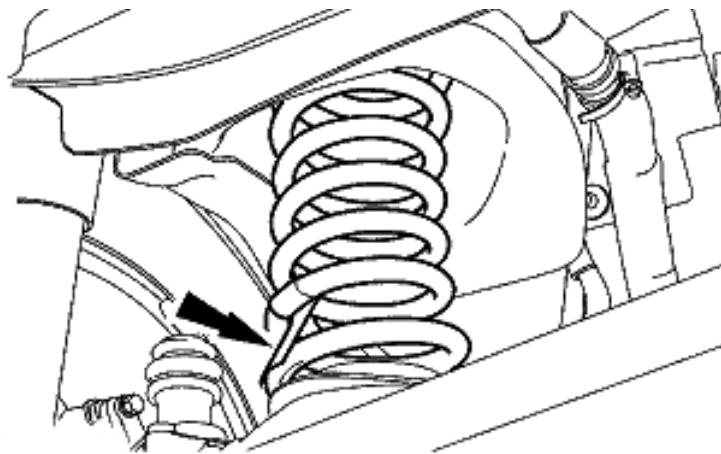


Fig. 5

6. Remove the retaining washer/isolator from the shock upper stud mount and remove the shock from the vehicle (Fig. 6).

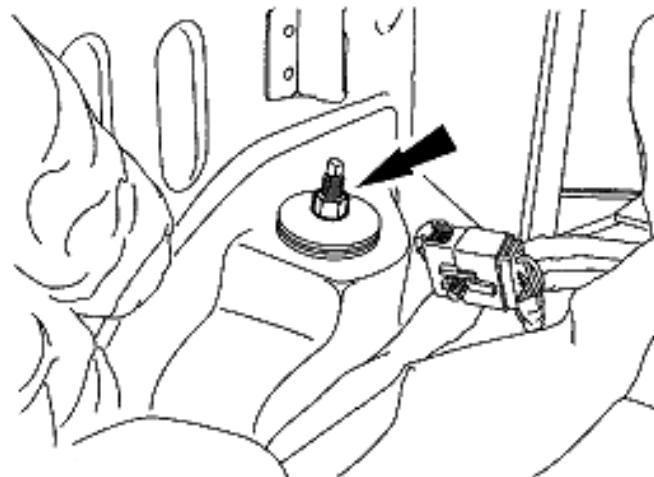


Fig. 6

**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.

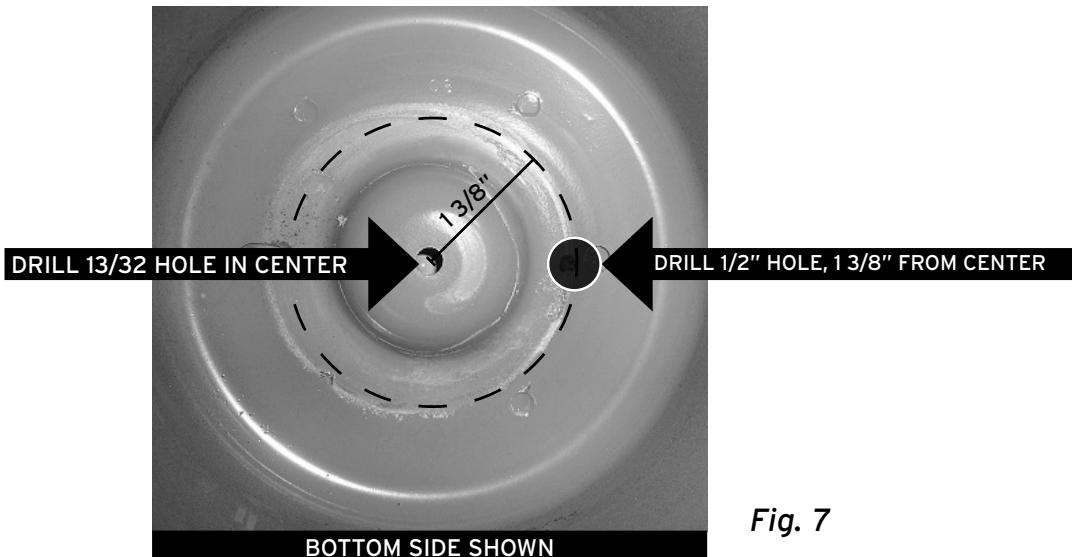
Also refer to your control system installation guide to ensure the installation of your air suspension system is complete.

**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. Drill through the center on the upper spring perch using a 13/32 drill bit.
2. From inside the trunk, measure 1 3/8" away from the previously drilled hole, toward the outside of the vehicle. Mark this location. Drill a 1/2" hole at this position for the grommet/air-line to go through (Fig. 7).

**Fig. 7**

3. Place the supplied nut plate (L) with nut facing down inside the lower coil spring perch (Fig. 8).

**Fig. 8**

4. Place the plastic spacer (M) over the lower coil spring perch (Fig. 9).
5. Remove the nut (C) and washer (D) from the air spring assembly. Thread the air spring into the lower nut plate and tighten by hand + 1 turn. Make sure to orient the air-port with the previously drilled hole in the chassis.
6. Install grommet (G) into the 1/2" hole and route the air-line through the trunk. Attach to the air spring fitting (J or N).
7. Unroll the air spring and seat against the upper spring land making sure the air line is not crushed or kinked against the chassis.
8. Within the trunk, apply the larger washer (D) and nut (C) to the threaded stud (I). Torque to 14Nm (10 lb.-ft.). Be careful not to over-torque and bend the sheet metal.


**CAUTION**

OVER TORQUING OF THE NUT CAN RESULT IN FAILURE OF THE AIR SPRING AND WILL NOT BE COVERED UNDER WARRANTY.

9. Cut the stock jounce bumper down to 1/3 it's standard height (Fig. 10).



Fig. 9



Fig. 10

10. Install the rear shocks into the upper shock mount. (Figs. 11 & 12)
11. Lift the axle and reinstall lower shock eye bolt. Do not torque at this time.
12. Reinstall the stabilizer end link to the chassis. Do not torque at this time.
13. For Convertible Models: Reinstall chassis support brace bolts (Fig.3).



Fig. 11



Fig. 12

## 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 components and axle.
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.

## 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. A). IT IS SAFE TO CYCLE THE SUSPENSION TO CHECK FOR CLEARANCES ETC. WITH THE LEADER LINE OPEN TO ATMOSPHERE (DISCONNECTED FROM AIR LINE).



### CAUTION

BEFORE SETTING VEHICLE ON THE GROUND FOR THE FIRST TIME, IT IS VERY IMPORTANT TO INFLATE THE AIR SPRINGS TO AT LEAST 3.5BAR (50 PSI). THIS WILL PREVENT ANY POSSIBILITY OF THE AIR SPRING KICKING OUT AND CAUSING A LEAK (FIGS. A, B, C).

*Fig. A*



Caused by cycling with air line attached without pressure. Remove air-line from spring to release vacuum and re-attach. Inflate to more than 3.5BAR (50 PSI) before lowering car to ground.

**Do NOT drive!**

*Fig. B*



Shows what spring looks like after lowering car to ground with less than 3.5BAR (50 PSI) and raising it with air pressure. **Do NOT drive!**

*Fig. C*



Shows what spring looks like when installed correctly.

# 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.
Stabilizer link to chassis	115	85
Lower shock eye	115	85
Upper shock nut	27	20
Air Spring lower stud to clamp bar	Hand snug + 1 turn	
Air spring upper stud to chassis	14	10
Wheel lugs	133	98
Rear support brace bolts (convertible)	63	46
Rear support brace bolts (upper convertible)	35	26

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



### 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 REAR WHEELS ARE STRAIGHT WHEN DEFLATING AND REINFLATING AIR SPRINGS.

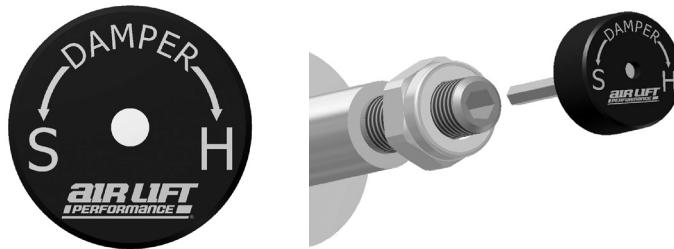
1. Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch brake lines, vent tubes, etc. Clear lines if necessary.
2. Inflate the air springs to 5.2-6.2BAR (75-90 PSI) and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

# Limited Warranty and Return Policy

Air Lift Company provides a limited warranty\* to the original purchaser of Air Lift Performance Air Suspension kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on cars and trucks 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.

\* Full Limited Warranty and Return Policy are available at [www.airliftperformance.com/warranty](http://www.airliftperformance.com/warranty) and are subject to change.

## WARRANTY REGISTRATION & CLAIMS

- To register your warranty, please visit <https://www.airliftperformance.com/support/warranty-registration/>
- To submit a warranty claim, please visit <https://www.airliftperformance.com/support/submit-warranty-claim/>



**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**



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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

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