

INSTALLATION GUIDE



FORD MUSTANG S550/S650 FASTBACK/CONVERTIBLE

REAR APPLICATION

Kit 76507

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



Thank you for purchasing an Air Lift Performance product! Take a photo of your sales receipt and then scan the 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 S550/S650 Fastback/Convertible. Read these installation instructions to correctly and safely set up the vehicle for a #lifeonair.

Air Lift assumes that the installer has the mechanical knowledge and ability to work on vehicle suspension systems and has basic tools necessary to complete a suspension replacement project. Special tools needed to complete the installation are noted on the System Overview page.

Air Lift reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Performance at **(800) 248-0892** or visit **www.airliftperformance.com.**

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

NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation, which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.



DANGER

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.



WARNING

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.



CAUTION

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE VEHICLE OR MINOR PERSONAL INJURY.



NOTE

Used to help emphasize areas of procedural importance and provide helpful suggestions.

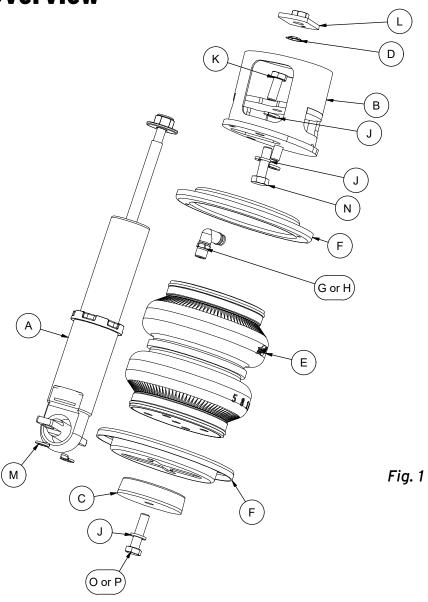


TECH TIP

Used to provide helpful tips to ease the installation process.



System Overview



HARDWARE CONTENT

Item	Part #	Description	Qty
Α	39130	WSHOCK, FORD S550, REAR	2
В	07998 A	BRACKET, UPPER, S550 REAR	2
С	13318 B	SPACER, LOWER CENTERING, S550	2
D	18609	3/8" PUSH NUT	2
Ε	58550	AIR SPRING, 2B6 REGULAR, 1/4-METRIC	2
F	11801 C	ROLL PLATE	4
G	21779	1/4" MNPT X 1/4" PTC ELBOW FITTING - DOT	2
Н	21851	1/4" MNPT X 3/8" PTC ELBOW FITTING - DOT	2

Item	Part #	Description	Qty
J	18628	M10, SPLIT LOCK WASHER, CZ	8
K	17517	M10-1.5 X 25 HEX CAP SCREW, CZ	4
L	11216 C	NUT PLATE-M10 X 1.5	2
М	18632	M10, SPLIT LOCK WASHER, CZ	4
N	17526	M10 X 1.5X 35 HEX CAP SCREW, 8.8 CZ	2
0	17933	M10 - 1.5 X 40 HEX CAP SCREW, ZN	2
Р	17936	M10 - 1.5 X 50 HEX CAP SCREW, ZN	2

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Install the System



See important safety notices on page 2.

SECTION 1.

PREPARE THE VEHICLE

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



Fig. 2

SECTION 2.

STOCK SUSPENSION REMOVAL

1. Disconnect and remove the stabilizer bar end link from the bar and from the lower control arm. (Fig. 3)



Fig. 3

2. With the hub supported, unbolt the lower shock mount from the lower control arm. (Figs. 4 & 5)



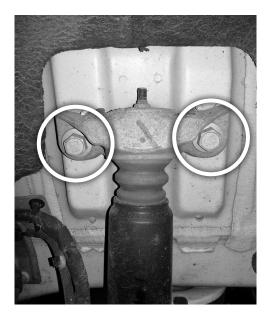


Fig. 4

Fig. 5

- 3. Unthread the two upper shock mount bolts and remove the shock from the vehicle.
- 4. Remove rear coil springs from vehicle.



COIL SPRINGS ARE UNDER SIGNIFICANT LOAD. PROCEED WITH CAUTION AND FOLLOW FACTORY INSTRUCTION FOR SAFE REMOVAL OF THE COIL SPRINGS.

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.



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

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

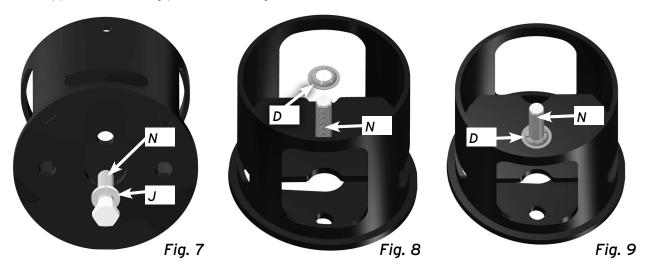


1. Begin by installing the air fitting into the air spring. Apply thread sealant to the threads of the air fitting. Tighten the appropriate fitting to the air spring 1 3/4 turns beyond hand-tight. (Fig. 6)



Fig. 6

2. Insert long bolt (N) with lock washer (J) through the upper bracket (B) center mounting hole. Retain the bolt to the upper bracket using push nut (D). (Figs. 7, 8 & 9)



3. Place the roll plate (F) over the air spring (E). Attach the upper mount to the air spring using two short bolts (K) and two lock washers (J). Torque to 27Nm (20 lb.-ft.). (Figs. 10 & 11)

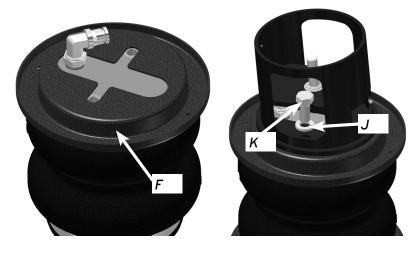
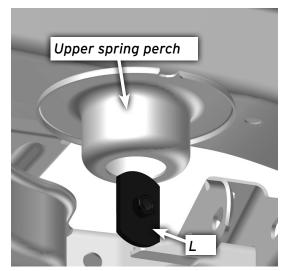


Fig. 10

Fig. 11



4. Insert the nut plate (L) into the opening within the upper spring perch with the flat of the plate facing downward, nut facing upward. (Figs. 12 & 13)



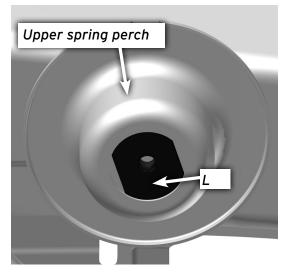


Fig. 12

Fig. 13

5. Apply the second roll plate (F) within the lower control arm spring pocket. (Fig. 14)

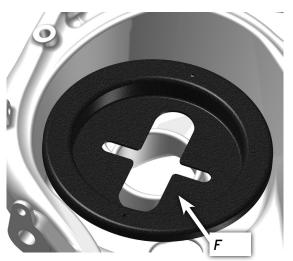


Fig. 14

6. Center the assembly over the upper spring perch, with the upper bracket sight hole aligned with the notch in the upper spring seat. Thread the upper bracket bolt into the nut plate, torque to 27Nm (20 lb.-ft.). (Fig. 15)

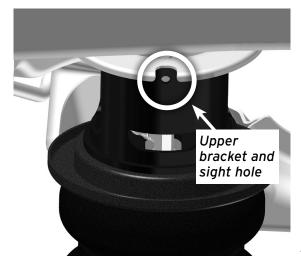


Fig. 15



7. Seat the air spring within the lower control arm/roll plate and align the threaded center of the air spring with the lower spring seat. Apply a long bolt (P) FOR STANDARD MUSTANG, (O) FOR PERFORMANCE PACK MUSTANG and lock washer (J) through the centering spacer (C) and into the underside of the control arm. Thread the bolt into the air spring, and torque to 27Nm (20 lb.-ft.). (Figs. 16 & 17)

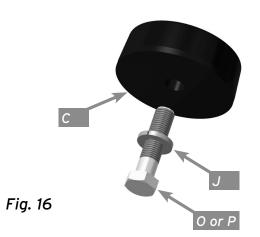




Fig. 17

8. Swap the upper shock mounts from the OE shock to the new shock (A). Torque rod nut to 27Nm (20 lb.-ft.) Attach the mount to the chassis, torque bolts to 90Nm (66 lb.-ft.). (Figs. 18, 19, & 20)







Fig. 18 Fig. 19

Fig. 20

9. For applications without Magnaride, bolt the shock to the underside of the lower control arm using the supplied nuts. Torque to 48Nm (35 lb.-ft.). For applications with Magnaride, bolt the shock to the underside of the lower control arm using the supplied M10 flag washers. Torque to 48Nm (35lb.-ft.). (Fig. 21)



Fig. 21

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10. Reinstall the stabilizer bar end link opposite the way it was originally mounted with upper stud facing towards air spring. Torque end link nuts to 103Nm (76 lb.-ft.). (Fig. 22)



Fig. 22

SECTION 4.

ROUTE THE AIR LINES



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.

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Before Operating

SET THE RIDE HEIGHT

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

Torque Specifications					
Location	TTY*	Nm	lbft.		
Shock rod nut		27	20		
Upper bracket bolt		27	20		
Lower spring seat bolt		27	20		
Stabilizer bar end link nut	✓	115	85		
Upper shock mount to body bolts	✓	90	66		
Lower shock mount to control arm	✓	48	35		
Wheel studs		201	148		
Air fitting (use thread sealant)		1 3/4 turns beyond hand-tight			

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







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.

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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 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/

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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.







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