



# Kit 78521

Ford Mustang S550

***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.*





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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. Read these installation instructions to correctly and safely set up the vehicle for a #lifeonair.

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

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

**NOTE**

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

## Important Safety Notices

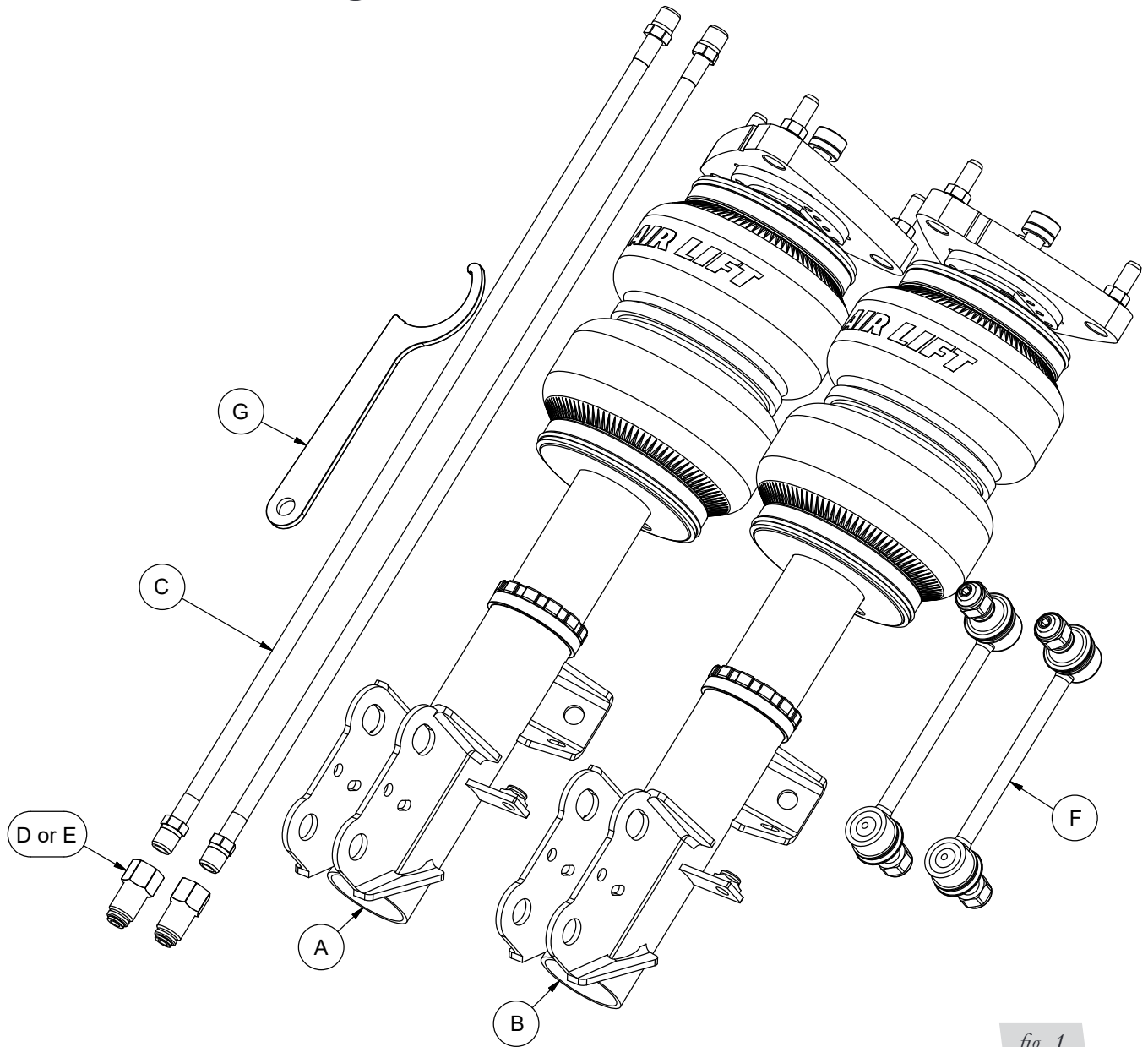
** WARNING**

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

** CAUTION**

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

# Installation Diagram



*fig. 1*

## HARDWARE LIST

Item	Part #	Description.....	Qty
A	35308	ASM, Strut, S550 Mustang Right Front..	1
B	35307	ASM, Strut, S550 Mustang Left Front.....	1
C	20997	Leader Line, 1/4" ID .....	2
D	21810	Union, 1/4"FNPT X 1/4" PTC, DOT .....	2
E*	21987	Union, 1/4"FNPT X 3/8" PTC, DOT.....	2
F	26772-009	End Link - 150mm.....	2
G	11289	Spanner Wrench .....	1

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



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

# Installing the Air Suspension

## PREPARING THE VEHICLE

1. Elevate and support the vehicle using its approved lifting points.
2. Remove the front wheel and support the hub assembly (Fig. 2).



*fig. 2*

## REMOVAL OF STOCK SUSPENSION

1. Unclip the sensor wire from the two attaching points on the strut (Figs. 3 & 4).



*fig. 3*



*fig. 4*

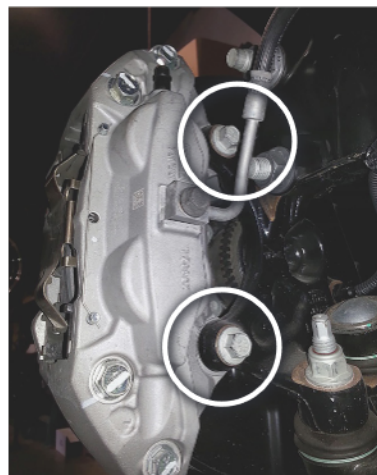
2. Unthread the stabilizer bar end link nuts from the strut and bar. Remove the end link (Figs. 5-7).



3. Unbolt the brake caliper. Remove the brake caliper and brake rotor. Secure the brake caliper out of the way while preventing strain on the brake line (Figs. 8 & 9).

## NOTE

*The lower strut attaching bolts have a splined section that bites into the knuckle. Because of this, the brake caliper and rotor will need to be removed in order to push the bolts out.*



4. Remove the two lower strut nuts and use a hammer to remove the bolts, while taking care not to damage the threads (Fig. 10). Support the knuckle to prevent damage to the lower ball joint.



5. Within the engine compartment, unthread the three upper mount nuts and remove the strut from the vehicle (Fig. 11).



fig. 11

## INSTALLING THE KIT COMPONENTS

1. Begin by installing the leader line (C) into the air spring. Apply thread sealant to the threads of the leader line. Tighten the appropriate fitting (D or E) to the leader line (1 3/4 turns beyond hand-tight). Tighten the leader line into the air spring 1 3/4 turns beyond hand-tight (Fig. 12).

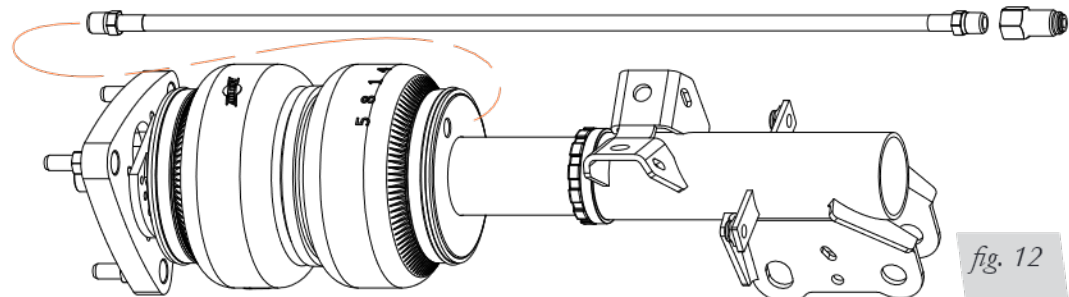


fig. 12

2. Attach the camber plate to the strut tower and torque nuts to 41Nm (30 lb.-ft.) (Fig. 13).



fig. 13



- Reinstall the lower mount bolts through the knuckle with the bolt heads toward the front of the vehicle (Figs. 14 & 15). A hammer may be required to push the bolts through the knuckle. Torque to 250Nm (184 lb.-ft.).

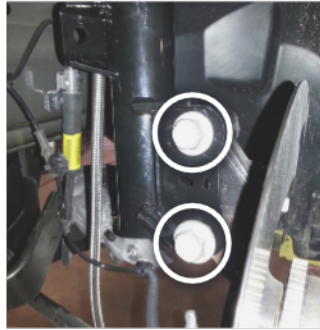


fig. 14



fig. 15

- Reinstall the brake rotor and brake caliper. Torque fixed brake caliper bolts to 115Nm (85 lb.-ft.). For sliding calipers (not shown), torque the guide pin bolts to 33Nm (24 lb.-ft.) (Figs. 16 & 17).



fig. 16



fig. 17

- Install the new stabilizer end link (F). Torque nuts to 103Nm (76 lb.-ft.) (Figs. 18 & 19).



fig. 18



fig. 19

## ROUTING THE AIR LINES

- 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.
- Routing should also allow for the suspension to extend without kinking or 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.



**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.

# Before Operating

## SETTING THE RIDE HEIGHT

Please refer to the User Guide supplied with this kit to set up the suspension.

Torque Specifications		
Location	Nm	Lb.-ft.
Camber plate to chassis nuts	41	30
Strut lower mount bolt/nuts	250	184
Stabilizer end link nuts	103	76
Fixed brake caliper bolts	115	85
Sliding brake caliper guide pin bolts	33	24
Wheel lugs	201	148
Braided air line threads	1 3/4 turns beyond hand-tight	

Table 1

Suggested Driving Air Pressure	Maximum Air Pressure
<b>35-55 PSI (2.41-3.8BAR)</b>	<b>125 PSI (8.62BAR)</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

 **CAUTION**

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

## CHECK FOR BINDING

1. Inflate and deflate the system (do not exceed 125 PSI [8.62BAR]) 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. 20 & 21) or an 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 “-17 clicks.” This means that the damper is adjusted 17 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 2015 Ford Mustang 2.3L EcoBoost.



fig. 20

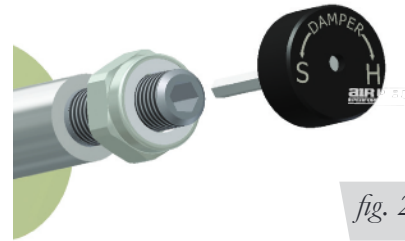


fig. 21

## 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.

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## Need Help?

Contact Air Lift Company customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.



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