



Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this S-197 Ford Mustang Track Pack 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.

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.



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



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



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

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.



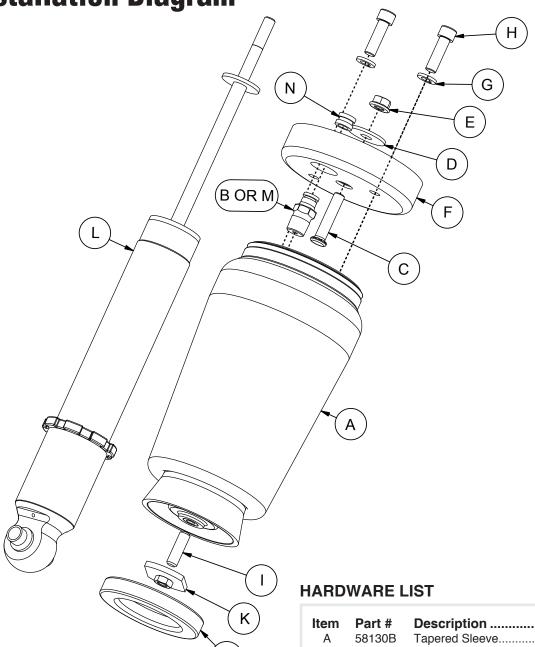
DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.



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







NOTE

- 1. Tighten air spring lower stud mount into clamp plate hand tight.
- 2. Orient the air fitting with the hole/grommet for air line.
- 3. Insert air line through the chassis/grommet and into the air spring fitting
- 4. Locate air spring against the upper spring perch. Apply washer and nut to threads and torque to 10 ft. lbs.

Item A B C D	Part # 58130B 21832 17448 18447	Description Qty Tapered Sleeve 2 UN, 3/8" FNPT x 1/4" PTC "DOT" 2 3/8"-16 x 1.75 Stud 2 3/8" Flat Washer 2
Е	18422	3/8" Flange Nut2
F	11045	Cup - Upper Spring2
G	18427	3/8" Lock Washer4
Н	17445	3/8"-24 X 7/8" UNF, HSHCS4
I	17447	3/8"-16 x 1.25 Threaded Rod2
J	13252	Tapered Air Spring Spacer2
K	10814A	Clamp Plate2
L	26979	Rear Shock2
M	21864	3/8" MNPT X 3/8" PTC4
N	10853	3/8" Grommet2



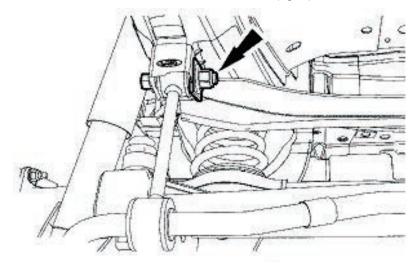
Installing the Air Suspension

PREPARING THE VEHICLE

1. Support vehicle with jack stands or a hoist at approved lifting points. Support the axle at maximum extension

REMOVING THE STOCK SHOCK/SPRING

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



2. For Convertible Models:

Disconnect the chassis support bracing that is underneath the axle (fig. 3).



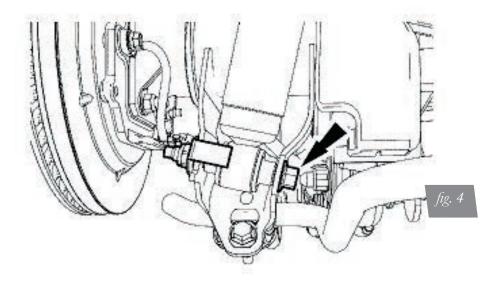
- 3. With the axle supported, remove the lower shock bolts (fig. 4).
- 4. Lower the axle until the coil spring can be removed.

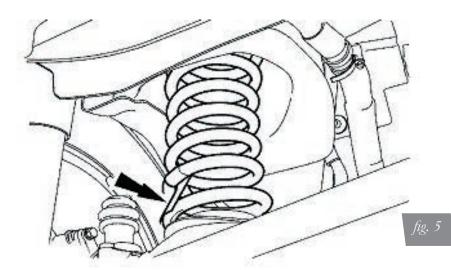
DO NOT HANG THE AXLE FROM THE DRIVESHAFT. OVEREXTENSION OF THE DRIVESHAFT CAN CAUSE DAMAGE.

- 5. Remove the coil spring and rubber isolators (fig. 5).
- 6. Remove the retaining washer/isolator from the shock upper stud mount and remove the shock from the vehicle (fig. 6).









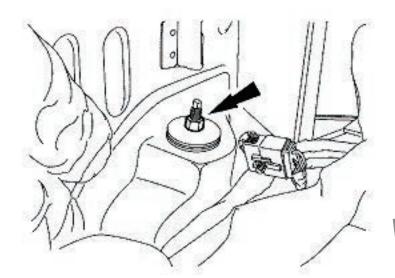


fig. 6



AIR SUSPENSION PREPARATION/INSTALLATION

- 1. Drill though the center on the upper spring perch using a 13/32 drill bit.
- 2. From inside the trunk, measure 1.375" 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).



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

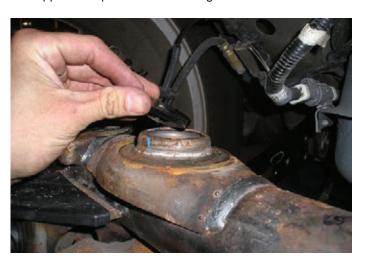


fig. 8

4. Place the plastic spacer (J) over the lower coil spring perch (fig. 9).



fig. 9



5. Remove the nut (E) 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.

A CAUTION

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

- 6. Install grommet (O) into the 1/2" hole and route the air-line through the trunk. Attach to the air spring.
- 7. Unroll the air spring and seat against the upper spring land making sure the airline is not crushed or kinked against the chassis.
- 8. Within the trunk, apply the larger washer (D) and nut (E) to the threaded stud (C). Torque to 14Nm (10 ft. lbs.). Be careful not to over-torque and bend the sheet metal.
- 9. Cut the stock jounce bumper down to 1/3 it's standard height (fig. 10).



fig. 10

10. Install the rear shocks into the upper shock mount.







fig. 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).



NOTE

Torque Specifications				
Location	Nm	ft. lbs.		
Stabilizer link to chassis	115	85		
Lower shock eye	115	85		
Upper shock nut	40	30		
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		

Table 1

14. With the suspension fully compressed, take a measurement from the fender to some reference point, typically the center of the axle. Record this as Max Compression (MC). Cycle the suspension to Max Extension (ME) and record the measurement from the same reference points. Take the difference between the two numbers and divide by two. Add that value to the Max Compression number and then set the suspension to that point (fig. 13). This position gives 50% stroke in either direction and is a great starting point for ride height. At this position torque the lower clevis bolt, upper and lower control arm bolts to manufacturer's specifications (Table 1).

Formula for calculating ride height:

Step 1: Step 2: Step 3: Answer: $\begin{array}{ccc}
ME & Y \\
-MC & X \\
\hline
X & 2 & = Y \\
\hline
\end{array}$ $\begin{array}{ccc}
X & + MC \\
\hline
7 & & \\
\end{array}$ Z = DESIGN HEIGHT

15. Reinstall wheels; retake the Max Compression and Extension measurements from the fender to lower wheel lip. Recalculate the ride height at 50% stroke and set the vehicle to that height. Enjoy the new look and handling! Now go get an alignment at the preferred drive height.

ALIGNING THE VEHICLE

- 1. Using the control system, set the vehicle height 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 (figs. 4-6). Once they have been loosened, re-torque to stock specifications (Table 1).

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help re-orient the bushing at its new position based on the custom ride height.

DAMPING ADJUSTMENT

The shocks in this kit have 30 settings or "clicks" of adjustable compression and rebound damping characteristics. Damping is changed through the shock rod using the supplied adjuster or a 3mm Allen wrench. Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened. Each front shock is preset to "-18 clicks". This means that the shock is adjusted 18 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track/setting of damping. This setting was developed on a 2005 Mustang GT and may need to be adjusted to the different vehicles and driving characteristics.

