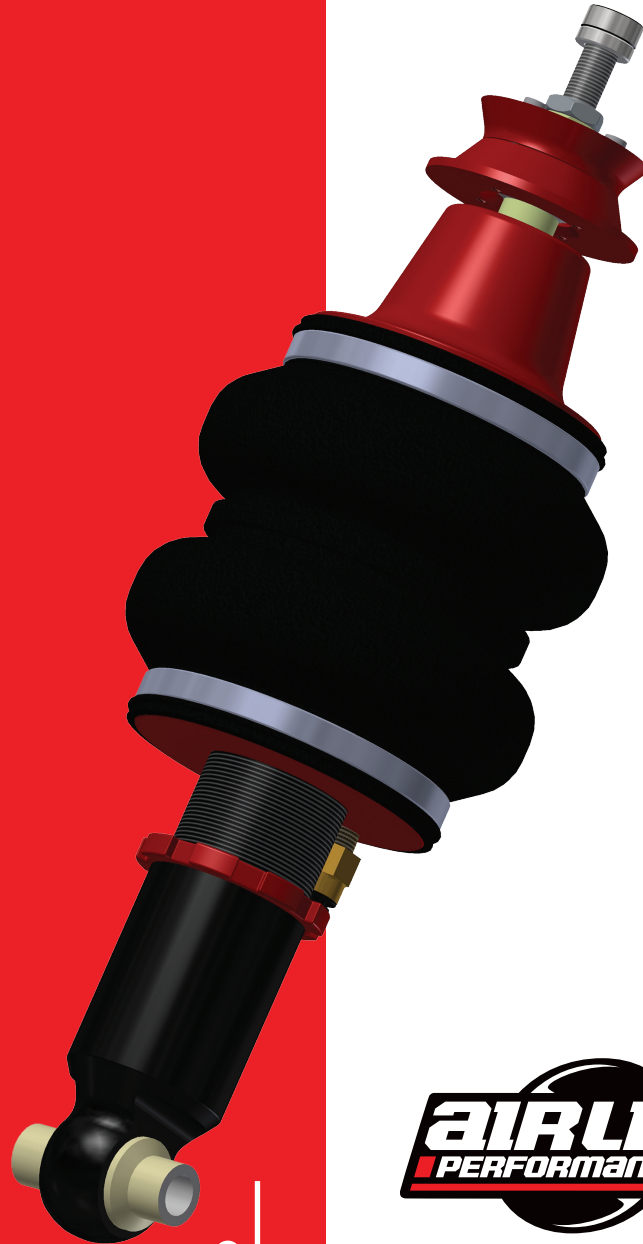


**Air Lift**<sup>™</sup>  
**PERFORMANCE**

**Kit 78601**  
Chevrolet Camaro  
5th GEN Track Pack  
***Rear 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.*

PERFORMANCE SUSPENSION PARTS

# Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Chevrolet Camaro 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, 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.

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### NOTE

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

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## 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 PERFORMANCE STRUTS/SOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.

# Installation Diagram

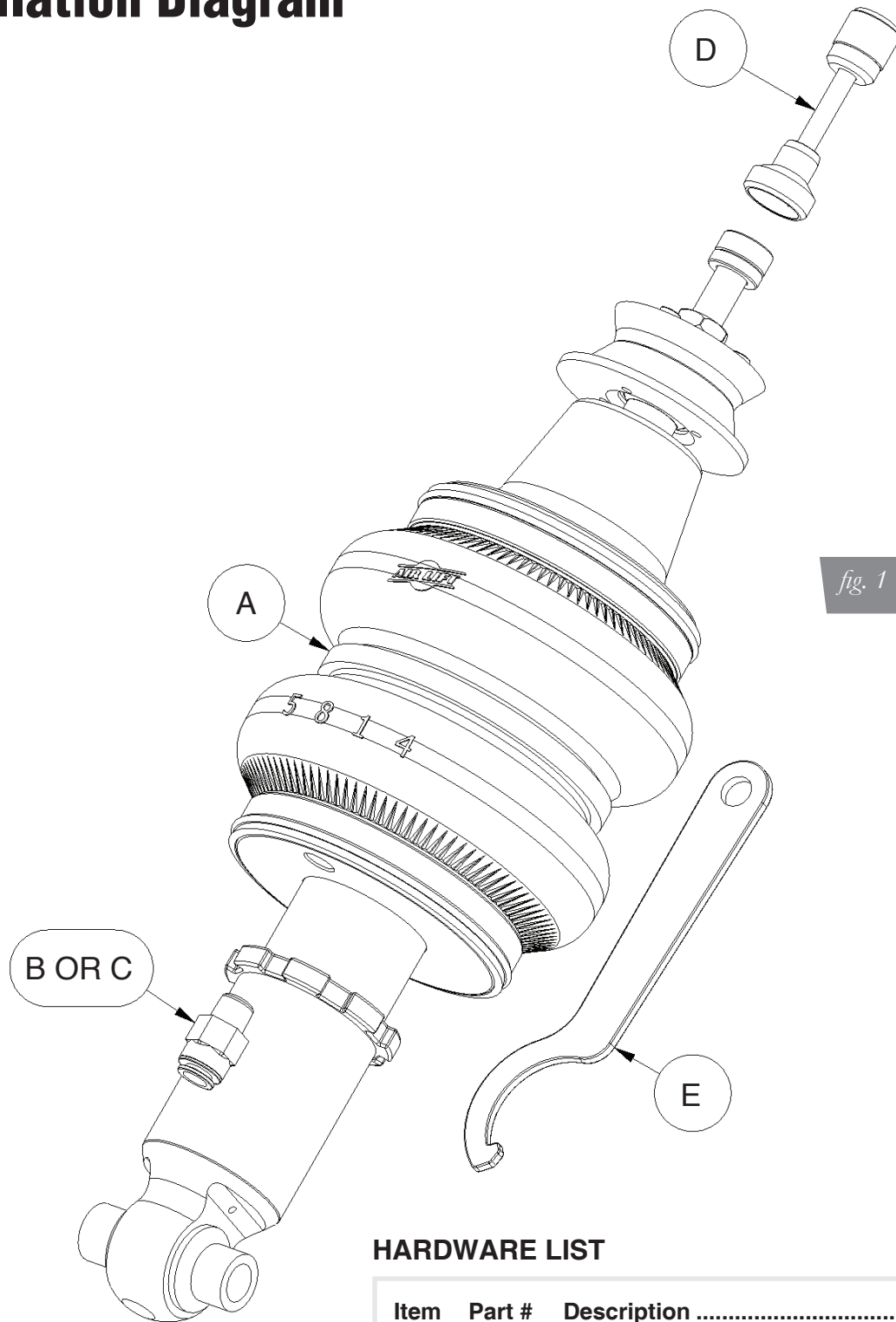


fig. 1

## HARDWARE LIST

Item	Part #	Description .....	Qty
A	35267	Rear Shock, Chevrolet Camaro Track Pack .....	2
B	21745	1/4"MNPT X 1/4" PTC Straight, DOT .....	2
C	21853	1/4"MNPT X 3/8" PTC Straight, DOT .....	2
D		Flexible Adjuster Extension.....	2
E		Spanner Wrench .....	1

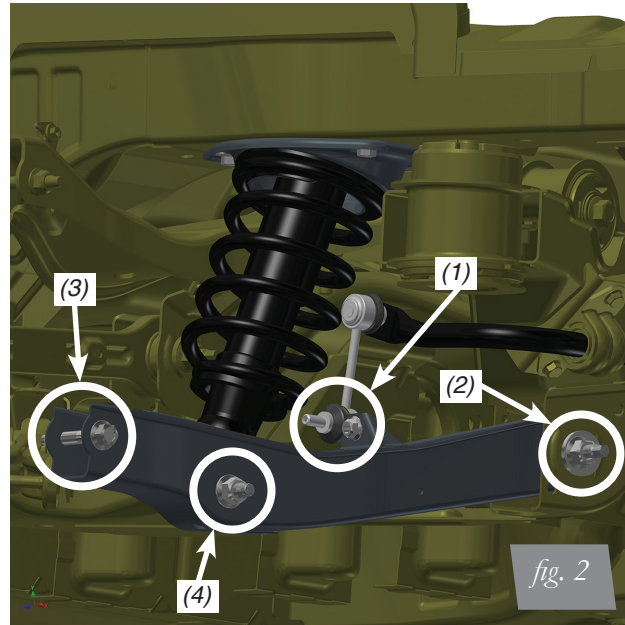
# Installing the Air Suspension

## PREPARING THE VEHICLE

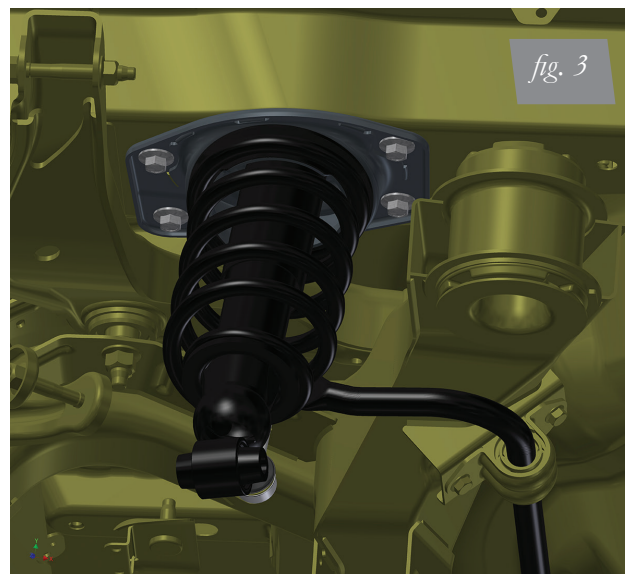
1. Elevate and support the vehicle with a hoist or jack stands.
2. Remove the rear tire and support the hub assembly.

## REMOVING THE REAR SHOCK

1. Disconnect the stabilizer bar link (1) from the control arm (fig. 2). 2010-2011 models shown, newer models have a stabilizer shaft.



2. Loosen the toe-adjustment bolt (2) (fig. 2). Support the lower control arm and remove the lower control arm to wheel hub bolt (3). Remove the lower shock eye bolt (4) and rotate the control arm down off the shock eye.
3. Remove the four upper mount bolts from the chassis and remove the shock assembly (fig. 3).



## PREPARING THE AIR SUSPENSION

1. Begin by installing the air fitting into the air spring (fig. 4). Wrap the threads of the air fitting with Teflon tape or thread sealant. Tighten 1  $\frac{3}{4}$  turns beyond hand tight.

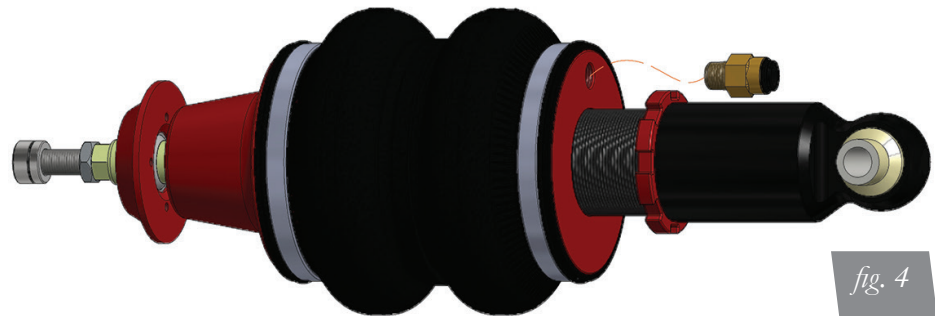


fig. 4

## PREPARING AND INSTALLING THE PILLOWBALL MOUNT

1. The upper bracket will need to be removed from the shock assembly (fig. 5). Follow the factory recommendations for shock/spring/bracket disassembly.

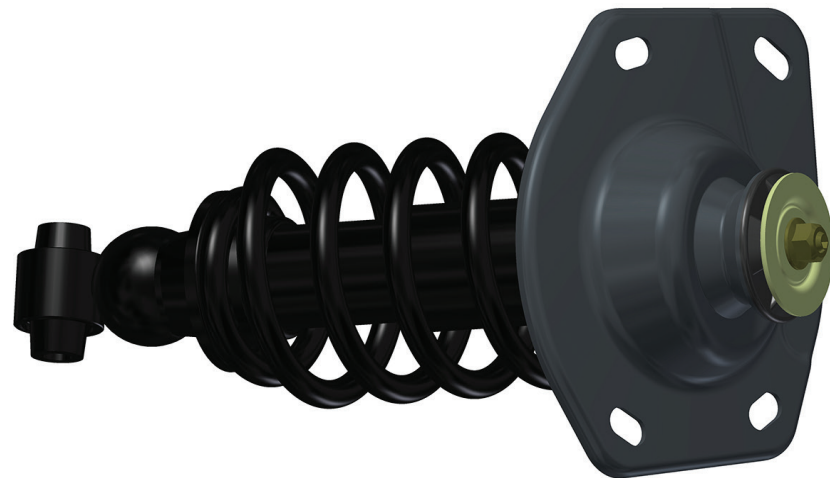


fig. 5

2. With the upper bracket removed, cut each of the welds (shown in red) that attach the spring seat to the bracket and remove the spring seat entirely (fig. 6). Now press the bushing out of the bracket (fig. 7).



fig. 6



fig. 7

3. Remove the four bolts attaching the upper mount from the pillowball bearing (fig. 8).
4. Place the upper bracket on the pillowball mount with the air fitting as shown (fig. 9).



fig. 8

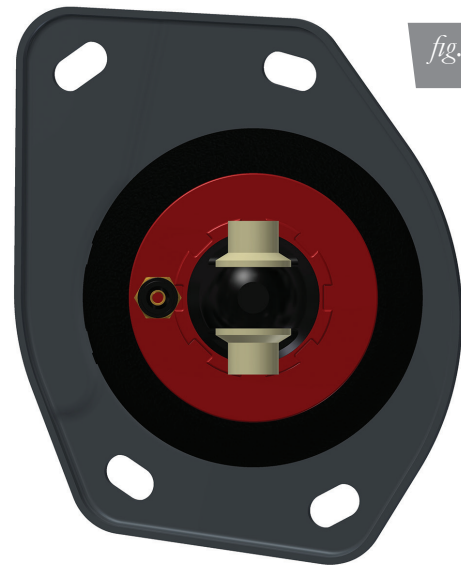


fig. 9

5. Reinstall the upper mount and four bolts with blue Loctite 242 on the threads of the bolts (fig. 10). Seat the bracket to the shock assembly by tightening the bolts evenly in a criss-cross pattern (fig. 11). Repeat the tightening sequence three times to ensure the mount has fully seated. Torque to 5Nm (45lb-in).



fig. 10



fig. 11

## PREPARING FOR DAMPING ADJUSTMENT

1. Remove the carpeted floor and side panels within the trunk. While looking at the trunk floor, notice the rectangular protrusion on each side of the trunk, close to the wheel wells (fig. 12).
2. Measure and mark 5.50" from the wheel well inside the trunk onto the rectangle. Measure from the top edge of the rectangle down 2.00". These intersecting lines mark the center of the 1.75" hole that needs to be drilled to access damping (fig. 13).

## CAUTION

WITHOUT THIS ACCESS HOLE, DAMPING CAN NOT BE CHANGED EASILY AND THE DAMPING KNOB MAY CONTACT THE UNDERSIDE OF THE TRUNK FLOOR CAUSING DENTING OF THE FLOOR AND DAMAGE TO THE SHOCK.

## NOTE

*If an access hole is not drilled, remove the damping adjustment knob from the shock by unthreading the knurled chromed portion of the damping adjuster (fig. 14).*

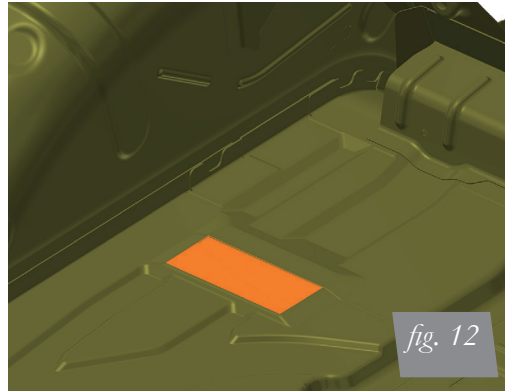


fig. 12

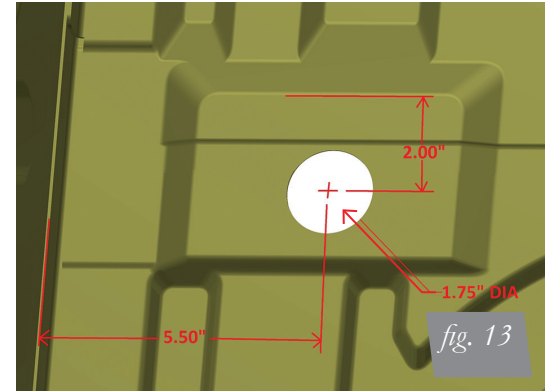


fig. 13

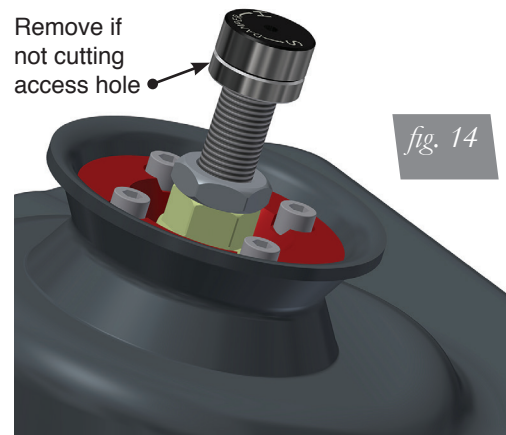


fig. 14

## SHOCK INSTALLATION

1. Insert the shock assembly into the shock pocket and attach the upper bracket to the chassis (figs. 15 & 16). Torque to 47Nm (35lb-ft).

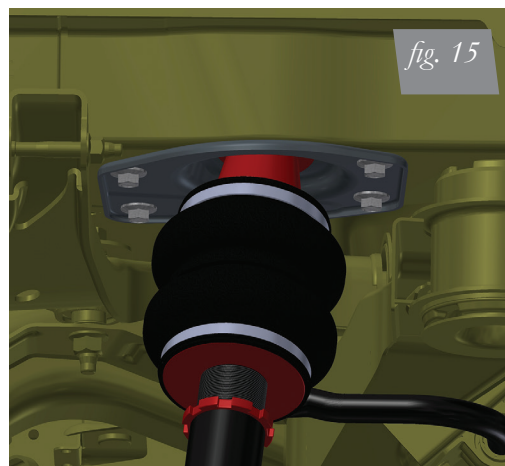


fig. 15

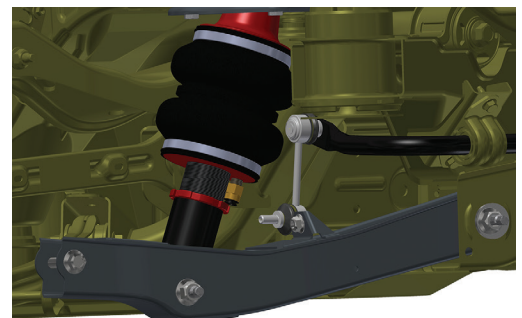


fig. 16

2. Rotate the lower control arm to the shock aligning the bolt hole with the shock eye mount. Insert the lower shock mount bolt. Align and attach the lower control arm to the hub assembly. Do not tighten bolts at this time.

3. Reattach the stabilizer end link to the control arm.
4. 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 the line or rubbing on other components. Check clearances to all other components.
5. With the suspension fully compressed, take a measurement from the fender to some reference point – typically the center of the axle. Record this measurement as Max Compression.
6. Cycle the suspension to Max Extension and record the measurement from the same reference points.
7. Take the difference between the two numbers and divide by two. Add that value to the original Max Compression number. Set the suspension to this point. This position will give 50% stroke in either direction and is a starting point for ride height (fig. 17).
8. With the suspension at this position, torque the lower shock bolt and upper and lower control arm bolts to manufacturer’s specifications (Table 1).

Formula for calculating ride height (fig. 17):

<i>Step 1:</i>	<i>Step 2:</i>	<i>Step 3:</i>	<i>Answer:</i>
$\frac{ME - MC}{X}$	$\frac{X}{2} = Y$	$\frac{Y + MC}{Z}$	<b>Z = DESIGN HEIGHT</b>

*fig. 17*

Torque Specifications		
Location	Nm	lb-ft
Pillowball mount to upper bracket	5	-
Upper bracket to chassis	47	35
Lower control arm to stabilizer link (2010-2011)	50	37
Lower control arm to stabilizer link bolt (2012 up)	26	19
Lower control arm to shock eye	80 + 120°	59 + 120°
Lower control arm to hub	40 + 120°	30 + 120°
Lower control arm to subframe adjustment bolt	115	85
Upper control arm to hub	80 + 120°	59 + 120°
Upper control arm to subframe bushing	50 + 120°	37 + 120°
Trailing arm to hub	40 + 120°	30 + 120°
Trailing arm to subframe	100	74
Lateral stabilizer rod to hub	115	85
Lateral stabilizer rod to subframe adjustment bolt	140	103

*Table 1*



## 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 (figs. 18 & 19) 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 shock is preset to “-15 clicks”. This means that the shock is adjusted 15 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2010 Chevrolet Camaro SS and may need to be adjusted to different vehicles and driving characteristics.



fig. 18

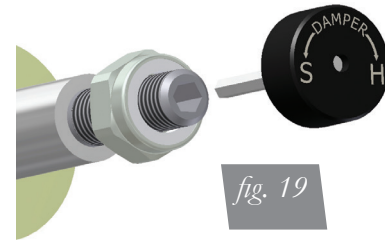


fig. 19

## 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. Once they have been loosened, re-torque to stock specifications.

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### NOTE

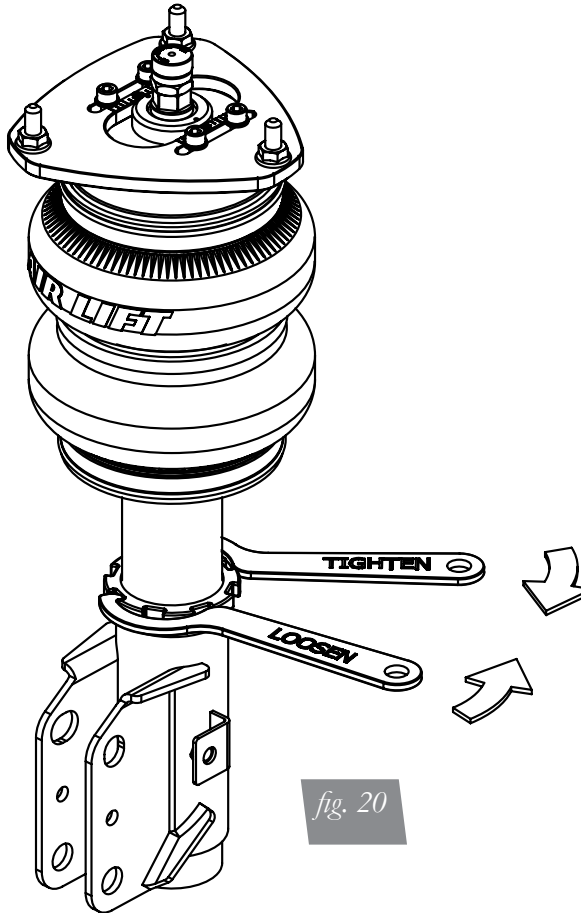
*It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help re-orient the bushing at its new position based on the custom ride height.*

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## ADJUSTING EXTENDED OR DROP HEIGHT USING LOWER MOUNT

Your struts have been pre-set at the factory to provide maximum drop height while maintaining adequate tire clearance to the air spring. If you wish to gain more extended height (lift), which is the same as reducing drop height, or want to lower the chassis further and there is still adjustment available at the lower mount, please use the following procedure:

1. Support the vehicle with jack stands or a hoist at approved lifting points.
2. Remove the wheel.
3. Using the supplied spanner wrench, loosen the lower locking collar (fig. 20).



4. Deflate the air spring to 0 PSI on the corner you are adjusting.
5. Disconnect lower mount from suspension.
6. Spin the lower mount to the desired location.

### NOTE

*Not all models will have further drop height available.*

7. Re-install lower mount to suspension and torque fasteners.
8. Tighten the lower locking collar to the lower mount using significant force.

### CAUTION

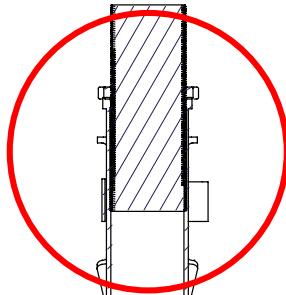
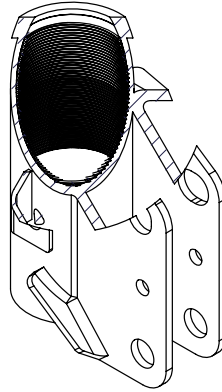
WHEN ADJUSTING HEIGHT UPWARDS, MAKE SURE THAT THE STRUT BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT (FIG. 21). WHEN ADJUSTING DOWNWARDS, MAKE SURE THERE IS ADEQUATE AIR SPRING CLEARANCE TO THE TIRE/WHEEL ASSEMBLY. CLEARANCE MUST BE CHECKED WITH SYSTEM FULLY DEFLATED AS WELL AS FULLY INFLATED TO ENSURE THAT NO RUBBING

OCCURS. FAILURE TO MAINTAIN ADEQUATE CLEARANCE CAN RESULT IN AIR SPRING FAILURE AND WILL NOT BE COVERED UNDER WARRANTY.

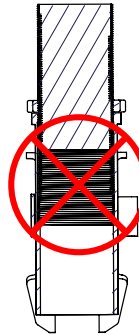
**CAUTION**

DO NOT ADJUST HEIGHT BY SPINNING AIR SPRING ON STRUT! DOING SO MAY CAUSE AN AIR LEAK AND COMPROMISE THE ASSEMBLY.

**FOR STRUTS:**

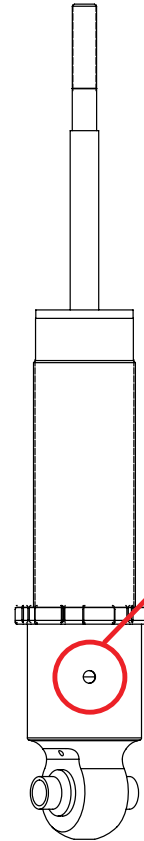


OK, no threads showing.



Not OK, threads are showing.

**FOR SHOCKS:**



Thread MUST be showing in window.

fig. 21