

# Installation Manual



## 10251 KIT

### 1.5" / 2.25" Leveling Kit

Chevrolet Silverado 1500 (2WD/4WD)\*

GMC Sierra 1500 (2WD/4WD)\*

*\*Will not fit 2007 Chevrolet/GMC Silverado/Sierra Classic models*

*\*Models with magnetic ride control (MagneRide) will require recalibration by a certified technician*

*Levels the stance of your vehicle by raising the front end a fixed amount, increasing both the ground and wheel well clearance for the installation of larger wheels.*

**Thank you and congratulations on the purchase of a leveling kit. Please read the entire manual prior to starting the installation to ensure you can complete it once started.**

## KIT LAYOUT



## KIT CONTENTS

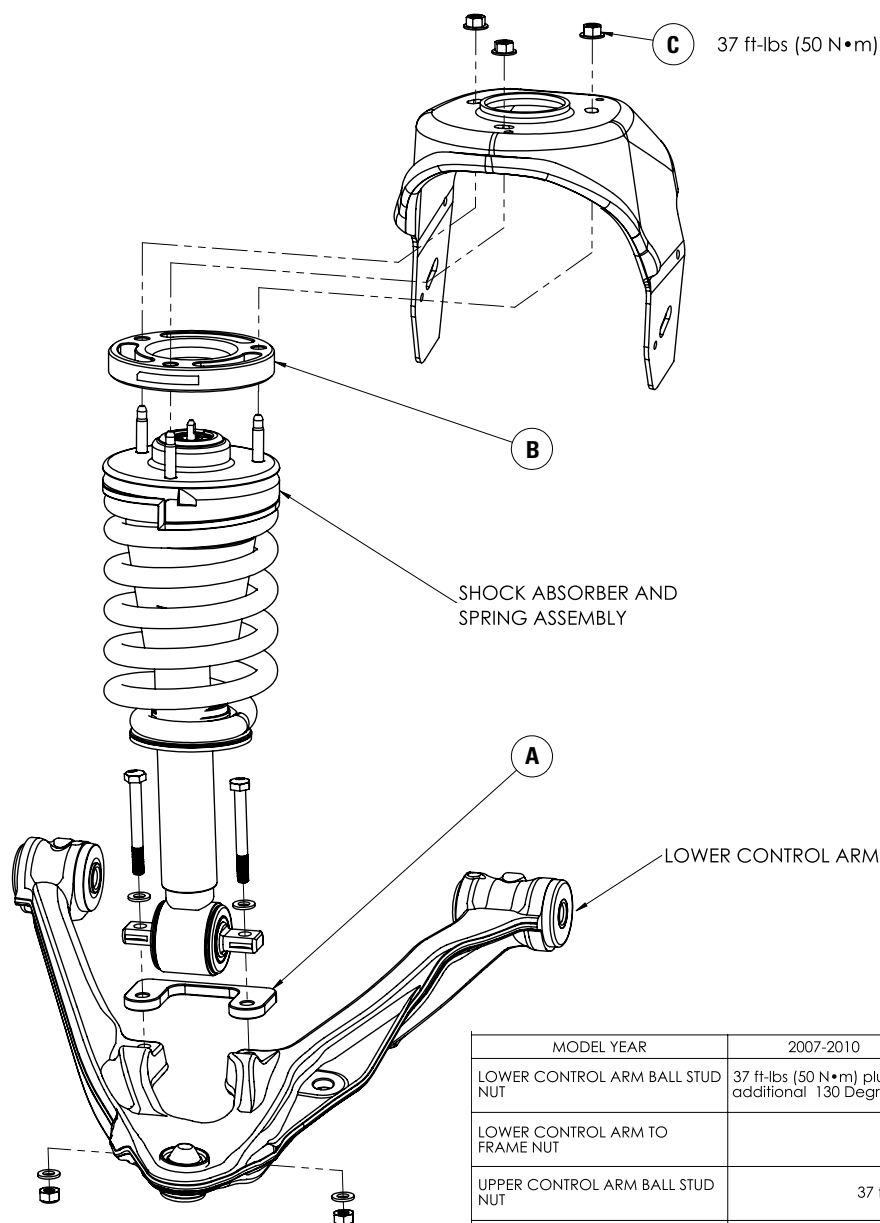
**Please make sure all the items shown in the above kit layout are provided in your kit before starting the installation. Reference the Explosion Diagram on the following page for assembly and installation Torque Values Chart**

KIT CONTENTS		QTY	PART #
<b>A</b>	Lower Strut Mount Spacer	2	HP1454
<b>B</b>	Upper Strut Mount Spacer	2	HP1453
<b>C</b>	Flange Nut, M10 x 1.5 mm	6	HP1457

## REQUIRED TOOLS

- Hoist or Floor Jack
- Safety Stands
- Safety Glasses
- Torque Wrench
- Standard Combination Wrenches
- 7/32" Hex Allen Wrench
- 1-1/8" Wrench or Deep Socket
- Metric & Standard
- Sockets Ratchet

## KIT EXPLOSION DIAGRAM & TORQUE VALUE CHART



MODEL YEAR	2007-2010	2011-2013	2014-2018
LOWER CONTROL ARM BALL STUD NUT	37 ft-lbs (50 N•m) plus an additional 130 Degrees *	37 ft-lbs (50 N•m) plus an additional 95 Degrees	37 ft-lbs (50 N•m) plus an additional 125-135 Degrees
LOWER CONTROL ARM TO FRAME NUT	129 ft-lbs (175 N•m)		
UPPER CONTROL ARM BALL STUD NUT	37 ft-lbs (50 N•m)		37 ft-lbs (50 N•m) plus an additional 90-110 Degrees
UPPER CONTROL ARM TO FRAME NUT	140 ft-lbs (190 N•m)		NEW DESIGN: 77 ft-lbs (105 N•m) OLD DESIGN: 140 ft-lbs (190 N•m) **
STEERING LINKAGE BALL STUD NUT	44 ft-lbs (60 N•m)		26 ft-lbs (35 N•m) plus an additional 85-100 Degrees
SHOCK ABSORBER TO FRAME NUT	37 ft-lbs (50 N•m)		
SHOCK ABSORBER TO LOWER CONTROL ARM BOLT	37 ft-lbs (50 N•m)		
STABILIZER END LINK NUT		17 ft-lbs (23 N•m)	
STABILIZER BAR BRACKET BOLT	37 ft-lbs (50 N•m)		

\* LOWER CONTROL ARM ON SOME MODELS MAY CONTAIN A CAPTURED WASHER. IF PRESENT, TORQUE NUT TO 92 ft-lbs (125 N•m)  
 \*\* NEW DESIGN HAS ADJUSTMENT CAM ATTACHED TO BOLT HEAD. OLD DESIGN HAS REMOVABLE ADJUSTMENT CAMS

## BEFORE STARTING THE INSTALLATION:

### Safety Warning!

Altering the suspension system of your vehicle may cause it to handle differently than it did from the factory. Larger wheel and tire combinations may increase the leverage on the suspension and steering components. This changes the way your vehicles handles and responds to abrupt maneuvers. Operate your vehicle at reduced speeds in all conditions to prevent loss of control. Failure to do so may result in serious injury. It is not recommend to combine the use of suspension lifts, body lifts, or other lifting methods.

### Installation Warning!

Use caution when disassembling and reassembling the vehicle. The proceeding instructions are guidelines only, the installer is responsible for ensuring that the vehicle is safe for use after performing the installation. It is recommended to use the factory service manual for the model/year of the vehicle when disassembling and assembling factory related components.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing. Prevent the suspension components from overextension by supporting them with a jack.

**PLEASE NOTE:** Due to the suspension geometry and vehicle tolerances, the amount of lift is a base figure. **Spacer thickness does not equate to the amount of lift due to the suspension geometry.** For example: a 1" thick spacer may provide a 2" lift. Always measure the vehicle ride height at all 4 corners before and after installation to ensure the results are as expected.

## WHEEL ALIGNMENT AND HEADLIGHT ADJUSTMENT

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician to align the vehicle to factory specifications. After the installation is complete, check to ensure that the vehicle's headlights are aimed properly. If not, a headlight alignment is required.

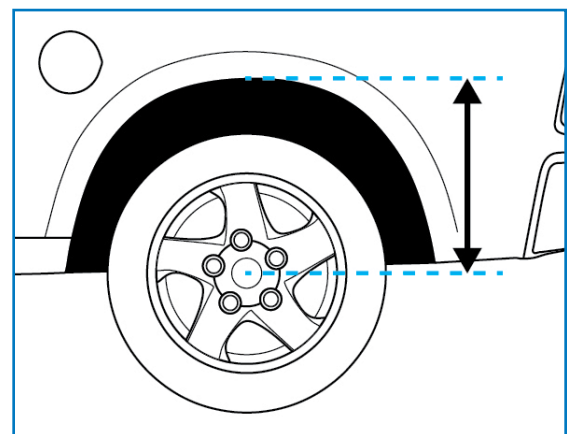
**PLEASE NOTE:** Models with Magnetic Ride Control (MagneRide) will require recalibration by a certified technician

### 1 MEASURE STOCK RIDE HEIGHT

Park the vehicle on a level surface.

Using a measuring tape, measure the distance between the center of the wheel hub and the bottom of the fender well (as shown in Figure 1) this will give you your ride height.

Note the ride height for all four corners.



1

## 2 REMOVE FRONT WHEELS

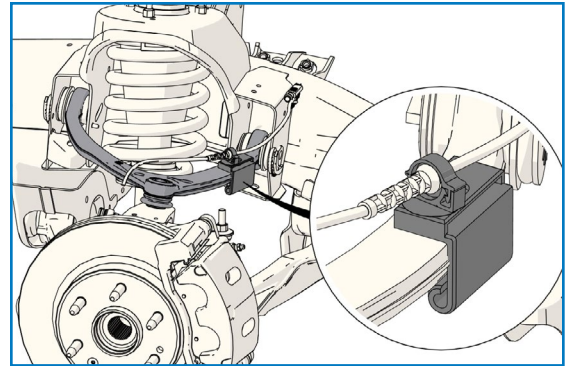
Place wheel chocks in front of and behind both rear wheels.

Raise front of the truck high enough to remove both wheels and attain a comfortable working height.

Place two jack stands under the vehicles frame.

Lower vehicle until the frame is supported by the jack stands.

Remove front wheels (21 mm).

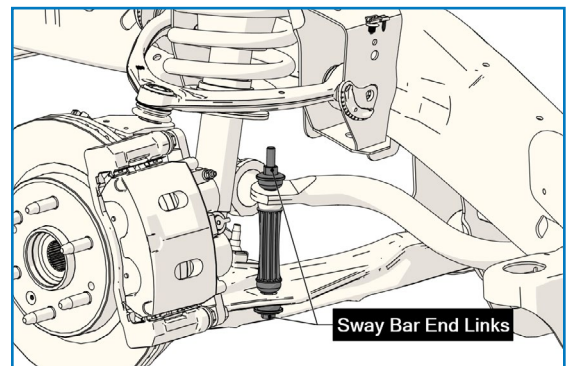


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- 3 The ABS sensor wire and brake line share a support bracket on the upper control arm.

Use a 10mm socket to unbolt the bracket. (See Figure 3).

- 4 Disconnect the lower Sway Bar End link by removing the nut securing it in place. (See Figure 4).



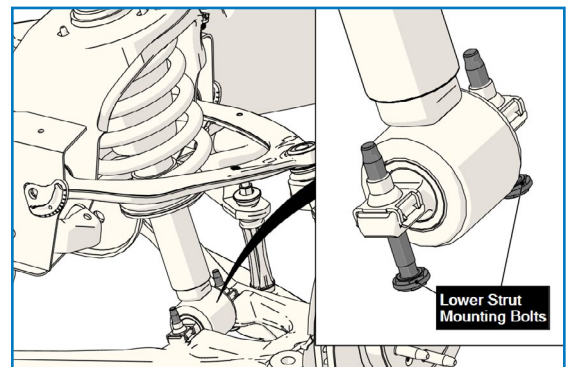
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- 5 Use a 15mm socket to remove the lower strut mounting bolts. (See Figure 5).

- 6 Pry up the ABS retaining clips from the upper strut mounting nuts.

Remove the upper strut mounting nuts that secure the strut to the strut tower. (See Figure 6).

- 7 Remove the entire strut assembly out from the vehicle. (See Figure 7 on following page).



5

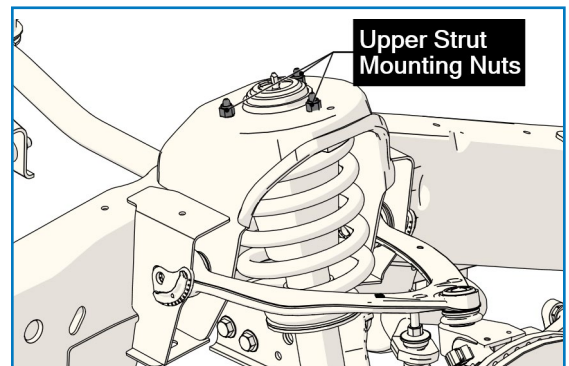
- 8 Place the Upper Spacer on top of the strut assembly (as shown in Figure 7 on the following page).

**NOTE:** The studs on the strut are not equally spaced. Rotate or flip the spacer until the holes in the spacer align with the studs on the strut.

## DESIRED LIFT OPTIONS

**For a 1.5" Lift:** Finish the installation by completing Step 9 only.

**For a 2.25" Lift:** Skip Step 9 and complete Steps 10-15.



6



## 9 1.5" DESIRED LIFT

Reinstall the strut assembly into the vehicle. Use the provided M10 flange nuts to secure the upper strut to the strut tower. (See Figure 6).

Use the OEM bolts that were removed in Step 5 to reattach the lower strut to the lower control arm. (See Figure 5).

Reinstall the sway bar end links. (See Figure 4).

Reinstall the ABS/brake line bracket. (See Figure 3).

Reinstall the ABS retaining clips that were removed in Step 6 and reattach the ABS line to it.

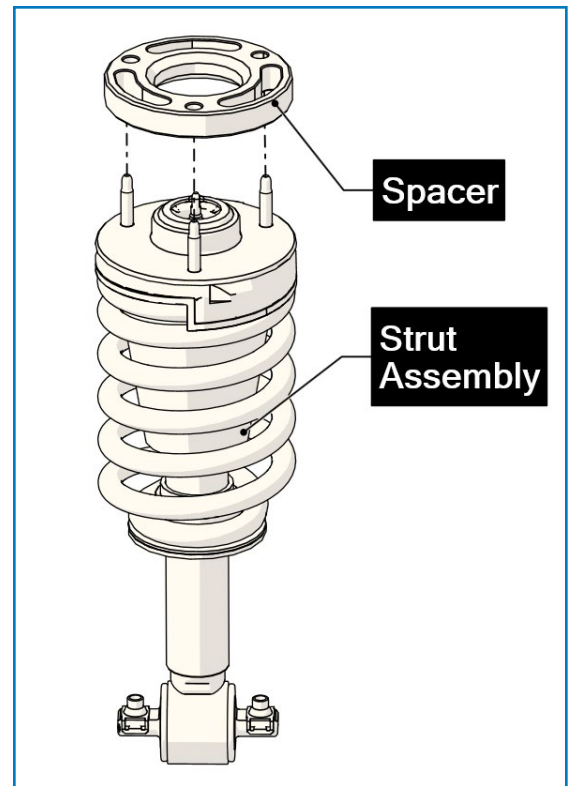
**NOTE:** If there are not enough threads remaining on the studs to reinstall the ABS retaining clips, use zip ties to secure the ABS line to the surrounding harness.

Torque all fasteners according to the *Torque Value Chart* on Page 3.

Complete Steps 3-9 for the other side.

**Congratulations!**

**You have completed the 1.5" Lift installation**



7

## 10 2.25" DESIRED LIFT

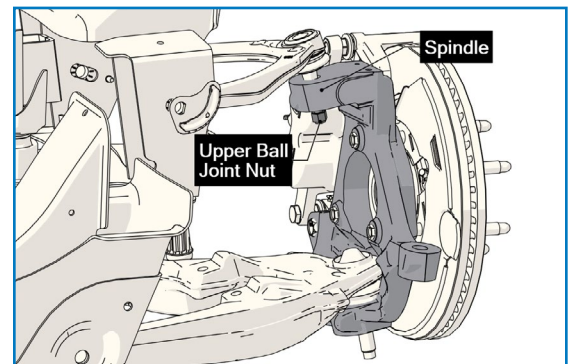
Loosen the upper ball joint nut. The nut should remain on the ball joint stem. Then carefully strike the spindle with a mallet to release the ball joint seating. (See Figure 10)

- 11 Use a jack to support the lower control arm and remove the upper ball joint nut.

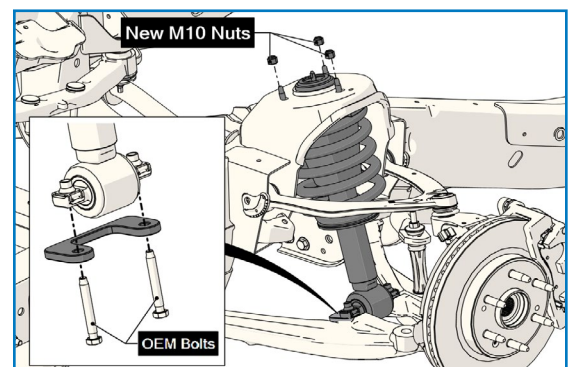
- 12 Slightly lower the lower control arm and reinstall the strut assembly along with the lower spacer. Use the new nuts that are provided in the kit to secure the top portion of the strut assembly, and use the OEM bolts to secure the bottom portion of the strut assembly to the lower control arm. (See Figure 12)

Torque all fasteners according to the *Torque Value Chart* on Page 3. Reinstall the ABS retaining clips to the studs on the strut assembly and secure the ABS line to it.

**NOTE:** Due to the added thickness of the spacer, there may not be enough threads to reinstall the ABS retaining clips to the studs on the upper strut. Instead use zip ties to secure the ABS line to the surrounding harness.



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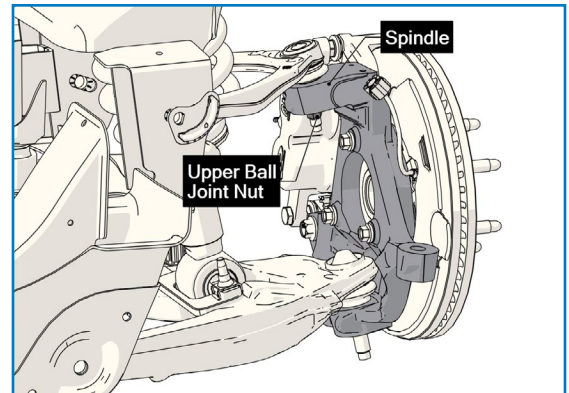


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- 13** Reattach the upper ball joint to the spindle and tighten the upper ball joint nut to the manufacturer's specifications. (See Figure 13)

**NOTE:** You may need to insert a pry bar through the coil spring and over the upper control arm. Pry downwards to force the control arm downwards.

**NOTE:** You may need to hold the ball joint stud with a hex key to prevent it from rotating while tightening the upper ball joint nut.



13

- 14** Reattach the ABS/brake line bracket and sway bar end links.

Tighten the sway bar end links according to the manufacturer's specifications.

- 15** Reinstall the wheel and torque fasteners according to the *Torque Value Chart* on Page 3.

Complete Steps 3-8 & 10-15 for the other side.

**Congratulations!**

**You have completed the 2.25" Lift installation**

## **POST INSTALLATION WARNING**

After the kit installation is complete and the vehicle is on the ground at its normal ride height, roll the vehicle backward and forward to settle the suspension. Tighten all components containing rubber bushings to the specified torque values. Verify adequate tire, wheel, brake line and ABS wire clearance by turning the front wheels completely to the left and then to the right. Ensure brake/ABS lines are not stretched when the suspension is at full droop. Test and inspect steering, brake and suspension components. Vehicle damage may result if the post installation checks are not performed.

## **VEHICLE HANDLING WARNING**

Larger wheel and tire combinations may increase the leverage on the suspension and steering components. Increasing the height of your vehicle increases the likelihood of rollover or loss of control during abrupt maneuvers, especially at high speeds. Operate your vehicle at reduced speeds in all conditions to prevent loss of control. Failure to do so may result in serious injury.

## **WHEEL ALIGNMENT & HEADLIGHT ADJUSTMENT**

After the kit installation is complete, a professional wheel alignment must be performed by a certified alignment technician to re-align the vehicle to within factory specifications. Additionally, ensure that the vehicles headlights are aimed properly. If not, a headlight alignment is required as well. If not properly aligned it can cause increased tire and suspension component wear.

## **VEHICLE RE-TORQUE & SAFETY INSPECTION**

After the kit installation and adjustments have been completed and within 50 miles of driving, perform a check over of all applicable fasteners and hardware to ensure they are adequately tightened to the specifications given (or as noted in the vehicle's factory service manual).

## **WARRANTY**

To be eligible for warranty, the owner must submit their warranty card or register online within 30 days of the purchase date.

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