



INSTALLATION INSTRUCTIONS

ENT-087-001

OEM SHOCK ABSORBER SPACER KIT TO SUIT CHEVROLET SILVERADO
1500 (2WD & 4WD) (With Steel Multi-Leaf Spring) 2019+



Lift Height Approx: 4" (100mm) Front / 3" (76mm) Rear - *(No Accessories Fitted)*



NOTE

Not compatible with composite rear leaf, ZR2, Trail Boss, AT4/AT4X, classic body LD or limited models. Also incompatible with Super Cruise hands-free driving.

Some images contained in these instructions are generic and are a representation of the actual model and/or parts used. Some steps may also show parts out of sequence to the instructional steps.



6 Hours
Approximately



SAFETY WARNING

ENTHUZE requires you read and understand the safety and pre-install directions on page 2 and 3 before commencing installation of this product.

Document No: 85-100-007-R01/121224

**Occupational health and safety procedures
must be observed at all times**



IMPORTANT WARNINGS

**BEFORE COMMENCING INSTALLATION OF THIS KIT
IT IS MANDATORY THAT YOU READ THE BELOW WARNINGS.**



SAFETY WARNING

- Read and understand instructions fully.
- Check the hardware supplied against the contents list on the following pages.
- This suspension kit can only be fitted to the vehicles Original Equipment Manufacturer (OEM) suspension components.
Do not combine suspension lifts kits, body lifts, or other lifting devices.
- Do not use this product for any vehicle make or model other than specified in these instructions.
- It is highly recommended that this kit be installed by a certified professional mechanic. ENTHUZE CANNOT BE HELD RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.
- While working on this vehicle, always use appropriate safety equipment.
- This product and or hardware must not be modified in any way. Do not remove labels from this product.
- Some images contained in these instructions are generic and are a representation of the actual model and/or parts used. Some steps may show parts out of sequence to the instructional steps.
- Fitting instructions are correct at the time of publication date and ENTHUZE cannot be held responsible for any vehicle changes from the manufacturer. It is the responsibility of the installer to ensure correct fitment.
- ENTHUZE recommends consulting a vehicle specific OEM Service Manual for proper disassembly and reassembly.
Tighten all bolts and fasteners to the torque specifications in the OEM Service Manual unless specified otherwise.
- Generally, altering your suspension system may change the way your vehicle handles. Take care when driving both on and off the road.
- Laws in regards to suspension modification vary from state, retailer and installers must inform end users about local laws and any breaches prior to installation.
- The vehicle must be in optimal operating condition prior to fitting this suspension kit. Repair or replace any worn or damaged components before proceeding.
- After installation of this product, a wheel alignment **MUST** be performed
- Read SAEJ2492 warning below.



SAEJ2492 WARNING

By installing this product, you acknowledge the suspension of this vehicle has been modified. As a result, this vehicle may handle differently than that of factory equipped vehicles. As with any vehicle, extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers.

Always wear seat belts and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive this vehicle safely may result in serious injury or death. Do not drive this vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions.

Some modifications (and combinations of modifications) are not recommended and may not be permitted in your State. Consult your owner's manual, the instructions accompanying this product and State laws before undertaking these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.



CUSTOMER INFORMATION

Customer Name: _____ Date: _____

Contact: _____

Part Number: _____ Batch Number: _____

PRE-INSTALLATION PROCEDURES

Prior to starting the installation it is mandatory to measure vehicle heights and head light positions. With the vehicle on a level surface, measure the vertical distance from hub center to fender on each of the four corners and recording the measurements in the below table.

Once the installation is finished, roll the vehicle forward and back to settle the suspension and then remeasure the vehicles hub center to fender values.

After installation, readjust the headlights close as possible to factory heights to prevent safety hazards.

VEHICLE HEIGHT MEASUREMENTS

	Left-hand Side Before	Left-hand Side After	Right-hand Side Before	Right-hand Side After
Front				
Rear				

Measurement is to be performed from the center of the hub to fender edge, straight up from the hub.

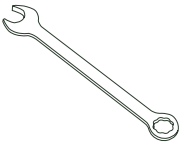
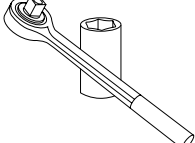
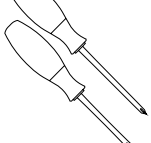
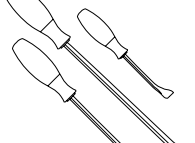
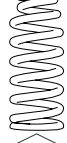
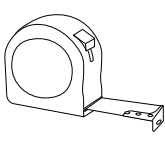
HEADLIGHT MEASUREMENTS

Left-hand Side Before	Left-hand Side After	Right-hand Side Before	Right-hand Side After

We strongly recommend using a Factory Service Manual for the specific Year / Make / Model as reference while installing.

- Before proceeding with this installation, the vehicle should be in optimal operating condition, and any worn or damaged components replaced first.
- All lifted vehicles may require additional driveline modifications and / or balancing.
- After installation of this product, a wheel alignment MUST be performed.
- If changing +/- 10% from OEM tire diameter, a Speedometer / Computer recalibration is required.

TOOLS REQUIRED

 Metric Wrench Set	 Metric Socket Set	 Screwdriver Set	 Lever / Pry Bars	 Spring Compressor	 Tape Measure
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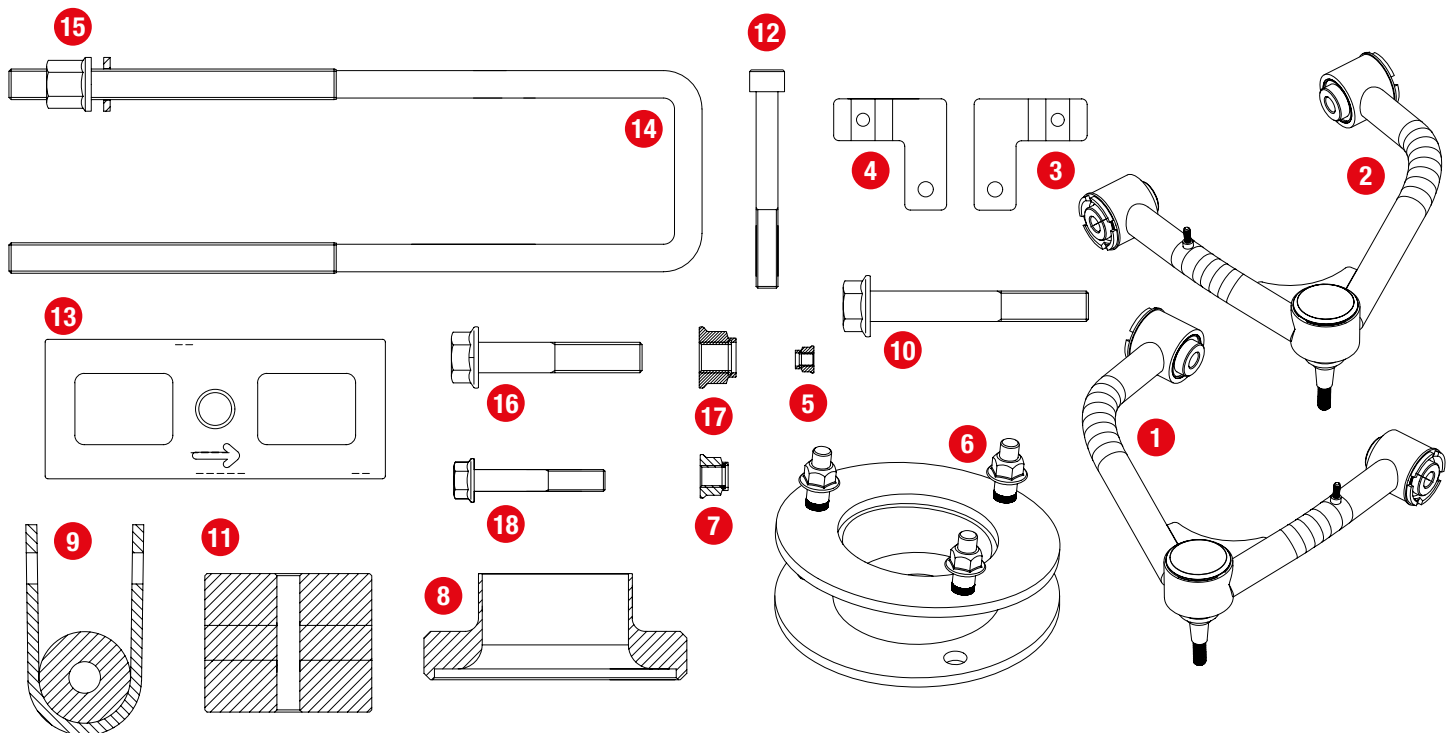
Any damage or losses caused by improper installation and application, goes beyond our quality warranty.

76-087-001 KIT PARTS LIST

SPACER KIT TO SUIT OEM SHOCK ABSORBERS

No.	Description	Qty
UCA Steel Kit		
1.	Upper Control Arm - LHS	1
2.	Upper Control Arm - RHS	1
3.	ARC Bracket - LHS	1
4.	ARC Bracket - RHS	1
5.	Nut - Nyloc (M6)	2
Extension Strut Kit		
6.	Spacer - Coilover Steel	2
7.	Nut - Hex Flange Nyloc (M10 x 1.5)	14
Shock Spacer Kit		
9.	Spacer - Shock	2
10.	Bolt - Hex Flange (M10 x 1.5 x 40mm)	4

No.	Description	Qty
Coil Spacer Kit		
8.	Spacer - Coil Alloy	2
Bump Stop Spacer Kit		
11.	Spacer - Alloy	2
12.	Bolt - SHCS (M10 x 1.5 x 90mm)	2
Rear Leaf Spacer Kit		
13.	Spacer Leaf - Cast	2
14.	U-Bolt - Square	4
15.	Nut - (M14)	8
16.	UCA Bolt - (M14 x 75mm)	4
17.	UCA Flange Nut - (M14)	6
18.	Shock Lower Bolt - (M10 x 1.5 x 60mm)	4



Any damage or loss caused by improper installation, application or failure to observe and follow our recommendations, goes beyond our quality warranty.

Document No: 85-100-007-R01/121224

PRE-INSTALLATION

1. Before installing, ensure spacer kit application is compatible with the vehicle.

Unwrap all components taking care not to damage or scratch in the process. Inspect for any damage.



NOTE

Retain all OEM (factory) hardware and components unless advised to discard.



TIP

It is good practice to lay out all parts to cross-reference against the parts list and record Batch Numbers.



2. All of the following steps should be repeated on the opposite side of the vehicle, unless otherwise specified.

REMOVAL AND INSTALLATION PROCEDURES - FRONT

3. Set the vehicle on a clean, level area and block the rear wheels for safety.

Engage parking brake.

Disconnect the vehicle power by removing the ground cable from the battery.

Fix the steering wheel in a straight position using a steering or column lock.

Lift the front of the vehicle and support it with jack stands under each frame rail.

Remove the front wheels and use a suitable workshop stand to support the front axle.



TIP

We suggest using a two (2) post vehicle lift if available, to lift and support the vehicle while completing the front and rear installation simultaneously.



- 4.** Locate the tie rod ball joint nut and remove with a 21mm socket.

Using a dead-blow hammer or mallet, strike the upright boss to release the taper.



- 5.** Using a 10mm socket, remove the ABS sensor bracket from the upright in two (2) places.

Unclip it from the upright and hang it to the side.



- 6.** Using a 10mm socket, remove the ABS sensor bracket from the upper control arm and hang it to the side.



- 7.** Use a 16mm wrench and 10mm socket to remove the sway bar end link nut from the lower control arm.



8. Remove the axle nut using a 35mm socket and press the CV joint into the hub.



WARNING

It is imperative that the axle be pushed back through the hub assembly.

Failure to do so can lead to damage to the CV boot or the CV joint itself.

Care MUST be taken when handling these CV axles.



9. Using an 18mm wrench, loosen but do not remove the upper control arm ball joint nut. With a dead-blow hammer, strike the upright boss to release the taper lock. Carefully remove the nut and lean the knuckle to the side.

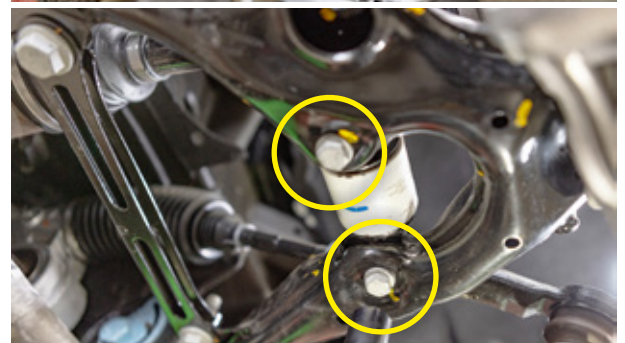


10. Support the lower control arm with a suitable jack. Remove the two (2) lower fasteners with 15mm socket and discard. Lower the jack and the lower control arm.



WARNING

Take care not to damage or stretch the ESC or brake lines.



- 11.** Gently pry up the plastic wire harness mount to gain access to the strut top nuts.
Use an 18mm wrench to remove the three (3) top strut mounting nuts.
Remove the strut assembly.



- 12.** Use a 21mm socket and wrench to remove the OEM upper control arm fasteners from the vehicle.
Discard upper control arms and fasteners.



- 13.** Using a paint pen, mark the strut top, isolator and coil orientation as seen in image.
These marks will be used as guides during reassembly.



- 14.** Place strut in spring compressor.
Compress the spring until spring load is released and the strut can spin freely to the spring.



WARNING

The spring is under extreme pressure and can cause bodily injury and/or death if handled improperly.

Use an 18mm socket to remove the strut nut, then remove the strut from the assembly.

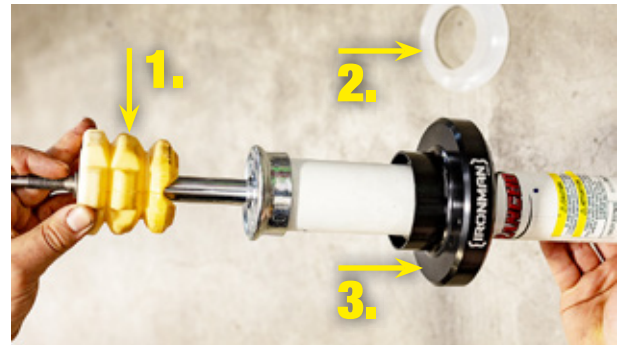


- 15.** Remove the OEM bump stop **(1)** and plastic coil isolator **(2)** from the strut.
- Place the alloy coil spacer **(3)** on top of the OEM spring seat, as seen in the image and face the logo outwards.
- Reinstall OEM shock bump stop **(1)** on the strut.



WARNING

Damage will occur to the vehicle if the bump stop is not fitted.



- 16.** Reinstall the strut into the coil strut top assembly and tighten the strut nut using an 18mm socket.
- Torque to 30ft.lb (41Nm).
- Take care not to overtighten.



NOTE

Recheck alignment of the strut assembly prior to decompressing the spring.



- 17.** Install the OEM nuts onto the strut top studs.
- Use a grinder with a cutting disc and trim the studs at top of the nut.



WARNING

Ensure the OEM parts are fitted prior to cutting studs



- 18.** Place the strut top spacer onto the strut assembly and secure using the supplied M10 flange nuts.
- Tighten and torque the nuts to 35ft.lb (48Nm).



- 19.** Install the ENTHUZE upper control arms into the vehicle using M14 fasteners supplied with an 18mm and 21mm wrench.
- Position the upper control arm at right angles to the vehicle as shown in the image.
- Torque nuts to 90ft.lb (122Nm).

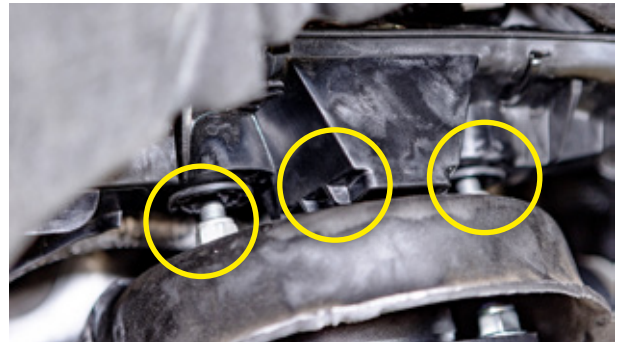


- 20.** Locate the nut clips on the lower mount of the strut assembly and use a lever bar to remove.



- 21.** Install the strut assembly into the vehicle by using the three (3) M10 flange nuts supplied and a 15mm wrench.

Do not tighten at this time.



- 22.** Install the strut assembly lower mount, using the supplied M10 fasteners. 15 and 13mm sockets will be required.

Ensure the bolts are positioned head up.

Tighten and torque nuts to 45ft.lb (61Nm).

Tighten upper strut nuts at this time and torque to 35ft.lb (48Nm).



- 23.** Carefully insert the CV axle into the hub and ensure the spines on both parts are aligned and slide freely.

Tighten and torque to 160ft.lb (217Nm).



WARNING

Failure to complete this step correctly or in the correct order may cause damage to the vehicle.



- 24.** Connect the upper control arm to the knuckle by installing the ball joint stud and fasten nut.
Torque nut to 65ft.lb (88Nm).
Install split pin and spread with pliers.



- 25.** Reinstall the sway bar link into the lower control arm using the OEM nut.
Torque nut to 45ft.lb (61Nm).
Reinstall the sway bar saddle onto the chassis.



- 26.** Reinstall the outer tie rod end to the knuckle using OE hardware.
Torque nut to 65ft.lb (88Nm).



- 27.** Reinstall the ABS sensor bracket from the upright, in two (2) places using a 10mm socket.
Clip it into the upright.



- 28.** Reinstall the ABS sensor bracket onto the upper control arm and tighten fasteners.



- 29.** With everything tightened to torque specifications, install front wheels and lower the vehicle.

With the steering wheel centered, turn the tie rod ends until the wheels are straight. If the steering wheel is not centered properly, the ABS/traction control lights may activate.

Turn the wheels from lock to lock and make sure the brake lines and ABS routing clears all suspension components adequately.

Reposition if necessary.

Using the appropriate tool, grease the upper ball joint just until the boot just starts to expand.



WARNING

Do not over grease. Over greasing can cause premature wear.

REMOVAL AND INSTALLATION PROCEDURES - REAR

- 30.** Park vehicle on a clean, flat surface and block the front wheels for safety.

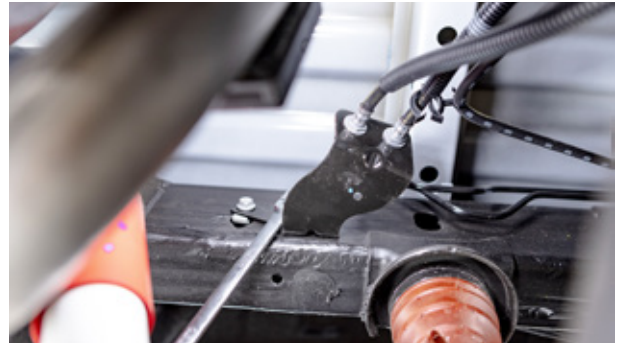
Using a suitable jack, raise the rear axle up and place jack stands under the frame in front of rear leaf spring hangers.



- 31.** Remove the ESC/ brake line bracket OEM fasteners from above the differential.



- 32.** The brake line bracket is located on the left-hand side, inside the frame rail.
Remove the two (2) M8 bolts that secure the bracket.



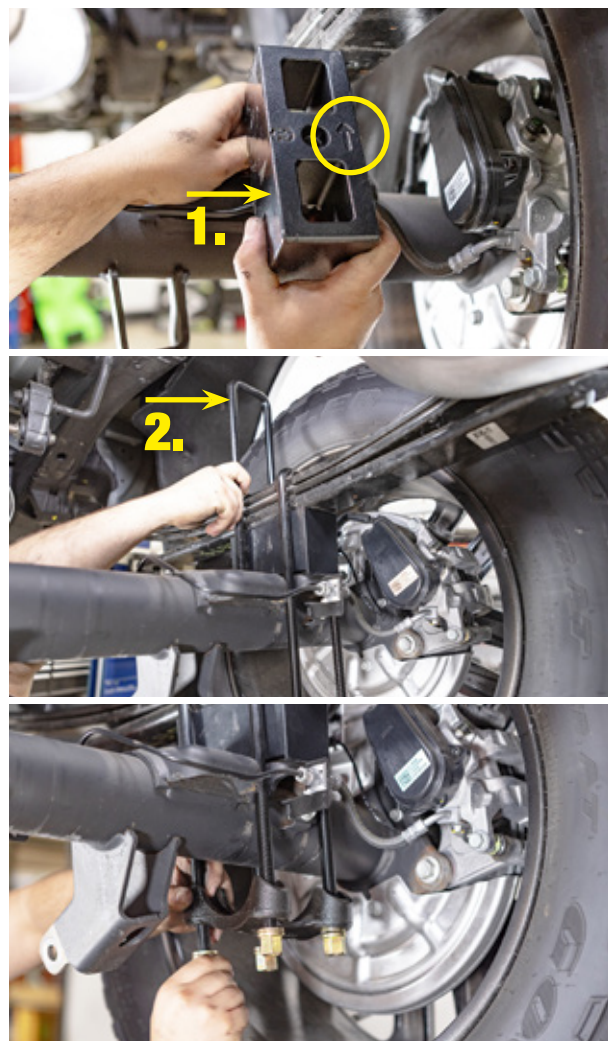
- 33.** Support and load the axle with a suitable jack.
Remove the left and right shock absorbers from the vehicle.



- 34.** Loosen the left-hand side u-bolts but do not remove.
Remove the right-hand side u-bolts and lower the axle 4 inches, making sure the brake and ESC lines remain loose.



- 35.** Place the ENTHUZE leaf spacer block **(1)** onto the axle with the arrow pointing toward the front of the vehicle. Align the pin with the hole. Install the supplied u-bolts **(2)** and flange nuts. Tighten, but do not torque the u-bolts. Repeat these steps for the right-hand side.



- 36.** Trim the u-bolts after installation.



- 37.** Secure the shock spacer to the OEM upper shock eye with M14 fasteners provided, using 19 and 21mm sockets. Do not torque at this stage.



- 38.** Install the shock spacer to the chassis with OEM fasteners.

Install the lower shock mount to the axle with OEM fasteners.

Tighten, but do not torque.



- 39.** Remove the OEM bump stop using a 10mm socket. Discard the OEM fastener.



- 40.** Install the ENTHUZE bump stop spacer, the OEM bump stop and the supplied socket head cap screw using an 8mm Allen key.

Tighten and torque to 35ft.lbs (47Nm).



- 41.** Reinstall the ESC / brake line bracket above the differential using OEM fasteners.

Reinstall the brake line bracket to the chassis using OE fasteners.



- 42.** Refit the wheels and lower the vehicle to the ground.

Torque lug nuts to manufacturer specification, the u-bolts to 110ft.lb (149Nm) and all shock hardware to 65ft.lb (88Nm).

Bounce the vehicle a few times to settle the suspension to the new ride height.

Recheck the wheel lug torque on all four wheels at this time.

Reconnect the battery ground terminal.



ADDENDUM – ADAPATIVE RIDE CONTROL (ARC) BRACKET

COMPLETE THE FOLLOWING STEPS IF THE VEHICLE IS EQUIPPED WITH ADAPTIVE RIDE CONTROL

- 43.** Remove 5mm button cap screw from the upper control arm supplied.



- 44.** Install the ARC bracket on the upper control arm using the previously removed button cap screw.

Torque to 5ft.lb (7Nm).

Insert the ball stud from the ARC sensor into the hole on the bracket.

Use the 6mm Nyloc nut supplied to attach the ball stud to the bracket.

Torque to 5ft.lb (7Nm).



45. Ensure a mandatory wheel alignment is performed by a qualified technician and the alignment is set to the recommended specs following.

 NOTE

On completion of the installation, have the suspension and headlights realigned.

After 310 miles (500km) recheck for proper torque on all newly installed hardware. Recheck all hardware for tightness after off road use.

Make sure to have any, and all electronic systems calibrated as indicated by the manufacturer for the features of your vehicle.

This includes but not limited to the steering wheel angle sensors, yaw sensors, cruise control, lane departure, etc.

WHEEL ALIGNMENT

 NOTE

Professional wheel alignment is required.

A strong understanding of wheel alignment procedure is required. ENTHUZE recommends wheel alignment be carried out by a trained alignment professional only.

ENTHUZE Steel Upper Control Arms will significantly change the wheel alignment settings by comparison to the OEM arm, for the purpose of correcting alignment after raising ride height. Adjustments to Camber, Caster and Toe will be required.

Using the lower control arm, in most instances set alignment within the following range, or according to OEM specification.

Front	Driver	Passenger	Tolerance	Total / Split
Camber	+0.0	+0.0	±0.5	+0.0
Caster	+3.0	+3.0	±0.5	+0.0
Toe	+0.05	+0.05	±0.05	+0.20

Always set wheel alignment settings in relation to tire wear for each individual vehicle.

ONCE INSTALLED...

**POST-INSTALLATION WARNINGS**

It is mandatory to perform post-installation checks after installing suspension components.

Failure to do so can lead to dangerous consequences, including vehicle damage, personal injury, or even death, therefore, post-installation safety checks are essential before driving the vehicle.

POST-INSTALL INSPECTION AND REFINEMENT

- Torque wheel lug nuts to manufacturer specifications.
- Inspect and test all steering, brake and suspension components for tightness and proper operation.
- Inspect wheels, brake lines/hoses and ABS lines, ensure adequate tire clearance and adequate looseness at full extension by turning the steering wheel completely to the left and then to the right.
- Inspect all rubber parts ensuring correct torque at ride height.
- Seat suspension components correctly by rocking the vehicle back and forth.
- A full professional wheel alignment to OEM specifications is mandatory and must be performed by a certified alignment technician.
- Inspect and adjust vehicle headlights to ensure correct aim and alignment.
- If vehicle is fitted with active or passive safety/collision monitoring and/or avoidance systems, these should be professionally checked and adjusted to ensure correct aim and function.
- Recheck all bolts and suspension components for correct torque values after two weeks or at 310 miles (500km).



Any damage or loss caused by improper installation, application or failure to observe and follow our recommendations, goes beyond our quality warranty.