PACKAGE CONTENTS:

- Coil-Over Assembly - Front Right
- Coil-Over Assembly - Front Left
- Coil-Over Assembly - Rear Right
- Coil-Over Assembly - Rear Left
- Hardware Kit
- Lowering Kit

TOOLS REQUIRED:

- 3/8" & 1/2" Torque Wrenches
- 3/8" & 1/2" Ratchets & Socket Set
  - 10, 13, 15, 17, 24 mm sockets
  - T15 Torx
- Metric Wrench Set
  - 10, 13, 15, 17, 24 mm wrenches
- Allen Wrench - 6 mm
- Small Screwdriver
- Drill Motor & Bits
- Door Panel Remover
  (for plastic push pins)
READ THIS FIRST

Review the entire instruction manual before proceeding with the installation. If any of these steps are not clear, please call (860) 434-9002 or e-mail us at techinfo@callawaycars.com for further explanation.

When checking the kit contents against the packing slip, make sure that no parts were damaged during shipping.

Installation of a Callaway Coil-Over Suspension System should only be performed by a qualified mechanic experienced in the installation and removal of suspension components.

Use of a hoist is highly recommended and will substantially reduce installation time. Never work on or under a vehicle unless it is properly supported by safety stands and wheels are blocked.

After installation, it is always important to inspect and adjust the following if necessary:

- Alignment - Perform a complete four-wheel alignment to ensure proper tire wear and performance.
- Height Adjustment - This should be performed with the wheels completely off the ground and with the springs fully unloaded.
- Brake System - Brake lines, anti-lock sensors and anti-skid sensors should be checked for proper attachment and clearance.

FRONT SUSPENSION REMOVAL

A) Raise the vehicle off the ground and firmly support it with safety stands. NOTE: Do not work underneath the car without the proper safety equipment.

B) After the vehicle is raised and supported at the frame by safety stands or a hoist, remove the front tires.

C) Raise the lower control arm using a floor jack or screw jack. This is necessary to take the spring load off of the OE damper. (See Photo 1)

RELATED PRODUCTS

- 220.50.6552 Stabilizer Bar Kit, 1997-2004 Corvette
- 220.60.6554 Stabilizer Bar Kit, 2005-2012 Corvette

Callaway Cars Incorporated
3 High Street
Old Lyme, CT 06371

Telephone 860 434 9002
Facsimile 860 434 1704
callawaycars.com
FRONT SUSPENSION REMOVAL (cont.)

A) Remove the upper shock mount nut.
   NOTE: This will be done from inside the engine compartment. (See Photo 2)

B) Remove the upper control arm bolts.
   NOTE: Be careful to note the number of washers on each bolt as this establishes the alignment-related adjustment. (See Photo 3)

FRONT SUSPENSION REMOVAL (cont.)

A) Remove the lower shock mount bolts. (See Photo 4)

B) Lower the suspension.

C) Rotate the upper control arm. Then remove the damper from the vehicle. (See Photos 5 & 6)
FRONT SUSPENSION REMOVAL (cont.)

A) Remove the front inner fenderwell valance. (See Photo 8)

FRONT SUSPENSION INSTALLATION

A) Using the provided lubricant, apply a liberal amount to the radius on the spherical bushing as shown. (See Photo 9)
3. FRONT SUSPENSION INSTALLATION (cont.)

A) Slide the provided rubber boot onto the spherical bushing as shown. (See Photo 10)

B) Install the damper assembly into the front suspension. (See Photo 11)

**NOTE:** Be sure to have the rebound adjustment opening facing outwards.

**NOTE:** The dampers are right and left side specific. Make sure you have the correct assembly on the correct side.

C) Secure the lower shock mount using the stock hardware, then torque to 22 ft/lbs (29.5 N-m).

D) Raise the suspension back into position.

---

3. FRONT SUSPENSION INSTALLATION (cont.)

A) Using the original hardware, secure the upper control arm using the correct number of washers between the frame and control arm mount as noted in Step 2E. Torque the bolts to 48 ft/lbs (65 N-m). (See Photo 12)

B) To secure the upper shock mount, lift the lower control arm until the delrin ball is seated to the bottom of the shock mount, then assemble the washer/bushing/washer on top.

C) After taking up “slack” by hand, tighten nut 3.5 turns and lock with provided jam-nut.

**NOTE:** It may be necessary to rotate the rebound adjustment window back to the correct placement. (See Photo 13)
3 FRONT SUSPENSION INSTALLATION (cont.)

A) Slide the reservoir into the front fenderwell opening, then route it up next to the radiator shroud. (See Photos 14 & 15)

B) C6 base models – Remove the radiator shroud. Then line up the provided template with the inserts, mark the hole and drill with a 13/32” drill bit. (See Photo 16)

C6-Z06 models – Secure the reservoir bracket to the existing hardware from the oil cooler located on the side of the shroud.

3 FRONT SUSPENSION INSTALLATION (cont.)

A) C6 Base Models secure the reservoir bracket as shown. (C5 models - go to step 3M)

NOTE: Depending on your vehicle model, your reservoir mounting position may be different. (See Photo 17)
FRONT SUSPENSION INSTALLATION (cont.)

A) Slide the reservoir into the bracket as shown. Note: Make sure the hood and hood hinge clear the reservoir before closing. (See Photo 18)

B) C5 models secure the provided frame rail bracket to the frame rail, then, secure the reservoir bracket to the frame rail bracket and secure the reservoir. (See Photo 19)

N) Using the provided Adel clamp, drill a hole in the frame and secure the reservoir hose as shown. (See Photo 20)

REAR SUSPENSION REMOVAL

A) Raise the suspension upwards using a floor or screw jack.

B) Remove the upper shock mount bolts.

NOTE: Mark the upper mount and the chassis so that during installation you can reinstall the upper mount in the correct orientation. (See Photo 21)

C) Remove the upper control arm bolts. (See Photo 22)
4 REAR SUSPENSION REMOVAL (cont.)

A) Remove the lower shock mount bolt and the anti-roll bar end link, then, lower the suspension and remove the damper from the bottom. (See Photo 23)

![Photo 23](image)

B) Remove the OE ride height adjusters to modify them for lowered ride height. With upper control arm bolts and damper assembly removed, a post-type screw jack can be used to compress the leaf spring. This allows you to access the OE ride height adjuster screw, one per side. Be sure to leave approximately 1/16” of rubber on the new contact area. (See Photo 24)

![Photo 24](image)

5 REAR SUSPENSION INSTALLATION

A) Install the stock upper mount on top of the spherical bushing. Then slide the rubber mount on top. (See Photo 26)

![Photo 26](image)
5 REAR SUSPENSION INSTALLATION (cont.)

A) Secure with the provided washer and nut, then torque to spec: 19 ft/lbs or 26 N-m. Use the provided jam nut as shown.

**NOTE:** C6 Models be sure to orientate the stock upper mount with the dimple facing outwards. (See Photo 27)

![Photo 27](image)

B) Install the damper into the suspension but do not tighten the lower mount at this time.

**NOTE:** Make sure the Banjo Reservoir fitting is facing outwards or towards the wheel, failure to do so may cause damage to the fitting. (See Photo 28)

![Photo 28](image)

5 REAR SUSPENSION INSTALLATION (cont.)

D) All C5 and base C6 models: Raise the suspension upwards and line up the upper control arm. Then secure the reservoir “L” bracket to the forward control arm mount using the supplied bolt as shown. (See Photo 29)

**NOTE:** C6-Z06 models go to step 5F.

E) Install the remaining upper control arm bolt, but do not tighten completely at this time.

![Photo 29](image)

F) C6 Z06 models - Remove the alignment washer from the forward-most bolt and replace it with the reservoir clamp as shown. (See Photo 30)

![Photo 30](image)
5 REAR SUSPENSION INSTALLATION (cont.)

G) Raise the suspension upwards until the upper damper mount is properly located, then install the upper mount bolts and torque to 22 ft/lbs (29.5 N-m).

**NOTE:** Make sure the dimple on the upper mount is facing outwards. (See Photo 31)

5 REAR SUSPENSION INSTALLATION (cont.)

H) Use a floor or screw jack to lift the suspension to approximate loaded level and torque the lower shock mount and control arm bolts to the specifications specified here:

- Lower Shock Mount (all models) – 72 ft/lbs (98 N-m)
- Upper Bolts, A-arm (all C5, base C6) – 81 ft/lbs (110 N-m)
- Upper Bolts, A-arm (C6 Z06) – 48 ft/lbs (65 N-m)

I) Install the reservoir extension bracket onto the reservoir. Then secure the bracket onto the “L” bracket as shown.

**NOTE:** Install the reservoir with about 25mm above the bracket with the adjuster facing downwards. (See Photo 32)

J) Secure the anti-roll bar end links.

Photo 31

Photo 32
COMPRESSION AND REBOUND SETTINGS

The dampers in this suspension system are adjustable for compression and rebound forces. The following explains the system’s adjustability. The initial settings specified below establish a baseline with rebound force at the middle of the curve and with compression relatively soft. Subsequent damper adjustment can accommodate various track conditions or driving preferences.

COMPRESSION. The compression adjustment is located on the top of each reservoir. Turning the compression adjustment knob in a clockwise or (+) direction increases the amount of force necessary to compress the shock. Likewise, turning the knob in a counter-clockwise or (–) direction decreases the amount of force to compress the shock.

Initial Setting: Start the new adjustment by turning the knob clockwise all the way until it stops. Then, back the knob out (counter-clockwise) until you either hear or feel the very first click. This is considered the zero point.

For the front dampers, continue turning the knob counter-clockwise until you get to click #7.
For the rear dampers, continue turning the knob counter-clockwise until you get to click #8.

REBOUND. The rebound adjustment is located at the top of each damper. Turning the rebound adjustment screw on the upper damper shaft in a clockwise or (+) direction increases the rebound forces. Likewise, turning the knob in a counter-clockwise or (–) direction decreases the rebound forces.

Initial Setting: Using the supplied red adjusting tool, start the new adjustment by turning the screw clockwise all the way, until it stops.
Back the screw out (counter-clockwise) until you either hear or feel the very first click. This is considered the zero point.
For the front dampers, continue turning the screw counter-clockwise until you get to click #4.
For the rear dampers, continue turning the screw counter-clockwise until you get to click #5.

SETTING COIL SPRING HEIGHT:
At ride height, adjust the main spring upwards so that the black helper spring is completely closed. This will add spring rate to the OE leaf spring.

NOTES: