

# LINGENFELTER

PERFORMANCE ENGINEERING

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## Cadillac CTS-V

Rear Suspension Snubber  
Installation Manual

# Parts List

This installation kit should include the following items.

Part Number	Part Description	Quantity
LN4221	3-1/8 in Diameter X 1/2 in Thick	2
LN4221-1"	3-1/8 in Diameter X 1 in Thick	2
LN4222	3-5/16 in Diameter X 1/2 in Thick	2
LN4222-1"	3-5/16 in Diameter X 1 in Thick	2

## Required Tools

21mm deep well socket

24mm deep well socket

3 ft. long breaker bar

6" extension

Torque wrench

2 Hydraulic jacks (or a secondary jack, such as emergency jack)

4 Jack stands

Blue Loc-Tite

## Time Required for Installation

1-1/2 to 2 hours, depending on experience.

## Before you begin

- Read instructions completely before starting each step.
- Pay attention to how parts are removed from the vehicle and make sure to keep track of all parts, in many cases they may be used in the installation.

## Step 1. Jacking & Support of Car

Note: If you are using an automotive lift, parts a & b may be skipped.

a). To raise the front of the car, (depending on the jack you use) you may need to initially raise the car from the side (using the secondary jack) to gain clearance for the hydraulic jack at the front of the car. Once this is done, support the car with the jack stands located on the frames cross member as shown in Figure 1.

b). With the front of the car supported, now raise the rear of the car. This is done with the jack positioned from the side of the car. The jacking point will be the rear axle or differential housing. Once the rear of the car is in the air, support it with the other two jack stands, on the car's subframe as shown in Figure 2 and Figure 3. You may wish to place a block of wood between the jack stand and subframe to avoid any scratches.



Figure 1



Figure 2



Figure 3

## Step 2. Removal of rear axle cradle

With the car supported, you can now begin to remove the four (4) bolts that secure the rear axle cradle.

- a). Place the hydraulic jack under the differential housing and apply light pressure, just enough to support the cradle.
- b). Locate the four (4) axle cradle bolts (shown in Figures 4, 5 & 6). There are two bolts in the front and two bolts in the rear on each side.
- c). Using the 24mm deep well socket, remove the front cradle bolts.
- d). Now remove the rear bolts using the 21mm deep well socket with 6" extension.
- e). Now you can lower the axle and cradle assembly. Allow the assembly to lower until it stops and is in "free hang". For extra safety, leave the jack under the differential housing and apply light load to support the assembly.



Figure 4 (Rear Bolts)



Figure 5 (Front Bolts)

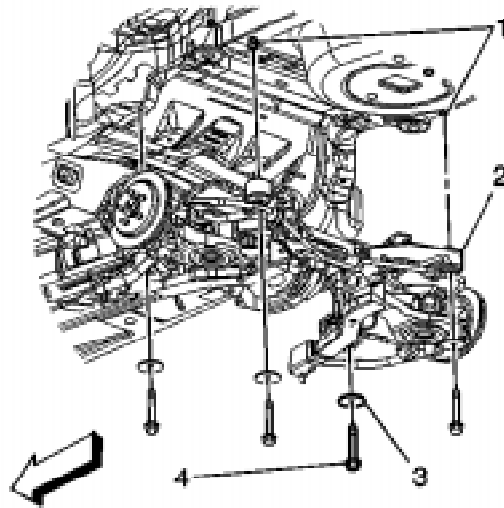


Figure 6

### Step 3. Installation of rear snubbers

To install the top rear cradle snubber, p/n LN4222-1”:

a). Install the THICKER snubber bushing (p/n LN4222-1”) on the top of the cradle, fitting the lip of the original bushing inside the inner diameter of the snubber bushing.

NOTE: To gain adequate clearance to install the top rear snubber bushing, it may be necessary to push the rear axle forward and/or, pry down on the axle.

b). Repeat for the opposite rear side.

\*\*The bottom side snubbers are left for installation just prior to remounting the axle cradle.

### Step 4. Installation of front snubbers

To install the front cradle snubbers, p/n LN4221 & LN4221-1”:

a). Mount the THINNER snubber bushing (p/n LN4221) on the top of the cradle between the cradle and frame, with the lip of the stock bushing fit inside the inner diameter of the snubber bushing.

b). Mount the THICKER snubber bushing (p/n LN4221-1”) on the bottom of the cradle (bolt side), fitting the lip of the stock bushing inside the inner diameter of the snubber bushing.

#### Step 4. Installation of rear cradle

NOTE: Apply blue Loc-Tite on all bolts

- a). Reposition the rear cradle and raise into location using the hydraulic jack.
- b). Install the bottom side, rear snubber bushings (p/n LN4222) with the lip of the stock bushing fit into the inner diameter of the snubber bushing.
- c). Install the mounting bolts.
- d). Torque to 144 ft.-lbs.

Once installed, the Rear & Front cradle snubber bushings should look as in Figures 7 & 8, respectively.



Figure 7 (Rear)



Figure 8 (Front)

## Step 5. Lowering of car

Lowering is the reverse of Step 1.

- a). Place the hydraulic jack in from the side of the car and position it so that it is centered on the rear differential housing.
- b). Raise the rear of the car enough to remove the jack stands and then slowly lower the car.
- c). Place the jack in from the front of the car and raise it enough to remove the jack stands.
- d). Lower the car until the wheels just begin to touch the ground and place the secondary jack back under the side of the car, and raise it until it comes in contact with the car's sub-frame.
- e). Finish letting the hydraulic jack down and remove.
- f). Lower the secondary jack and remove.

Congratulations, you have just completed the installation of the rear suspension snubber kit for your Cadillac CTS-V. Please see Lingenfelter Performance Engineering for all your Cadillac CTS-V performance needs.