



AIR DITCHER

AIR TO COIL CONVERSION KIT

94-96 Cadillac DeVille • 91-96 Cadillac El Dorado • 94-97 Cadillac Seville



This product is intended to modify your vehicle and replace the existing electronically controlled suspension components with a passive coil and shock system. The system has been designed and extensively tested to provide the same ride quality and height as the O.E.M. system.



This conversion kit requires the removal of the stock coil spring, which may be under compression. Proper procedure must be followed to minimize risk of personal injury and product damage.

General Precautions

When servicing any vehicle be sure to follow all safety procedures.

First, make sure that when lifting the vehicle that you are using the appropriate jack for the weight of the vehicle.

Make sure before going underneath any vehicle that it is properly supported with sturdy jack stands and on level ground so that the vehicle doesn't fall or slide off of the jack and onto you.

As with any automotive repair, make sure you have the appropriate tools to do the job so you don't damage any parts on the vehicle. There is a list of tools needed included in these instructions.

Safety glasses and mechanic gloves should also be worn for your protection.

Be sure to follow the instructions in the order that they are given. The instructions are in a certain order for a reason and improper installation could lead to damage to your vehicle or the parts. Keep in mind that if you damage the parts during installation you will be responsible for the replacement parts.

Included In This Conversion Kit



Minimum Tools Needed For This Installation



Metric Hand Tools (Sockets/Wrenches)



Jack and Jackstands



Grease Pencil

Torque Specifications

Wheel Lug Nut.....	105 ft. lbs
Outer Tie Rod.....	40 ft. lbs.
Strut (Tower) Mounting Nut	65 ft. lbs.



WARNING

Our complete strut assemblies are completely assembled from the factory. These units contain a coil spring under compression. DO NOT ever loosen the top mount main bolt for prevention of both physical harm and vehicle damage.

CAUTION

Once you are ready to disable the ride light, you will need to disconnect the ground battery cable (-) to prevent electrical shock and/or malfunction.

Removal

1. Remove nuts attaching top of strut assembly to body.
2. Raise vehicle and support frame with jackstands.
3. Remove Tire and wheel assembly.
4. Remove road sensing suspension position sensor from lower control arm. (1)

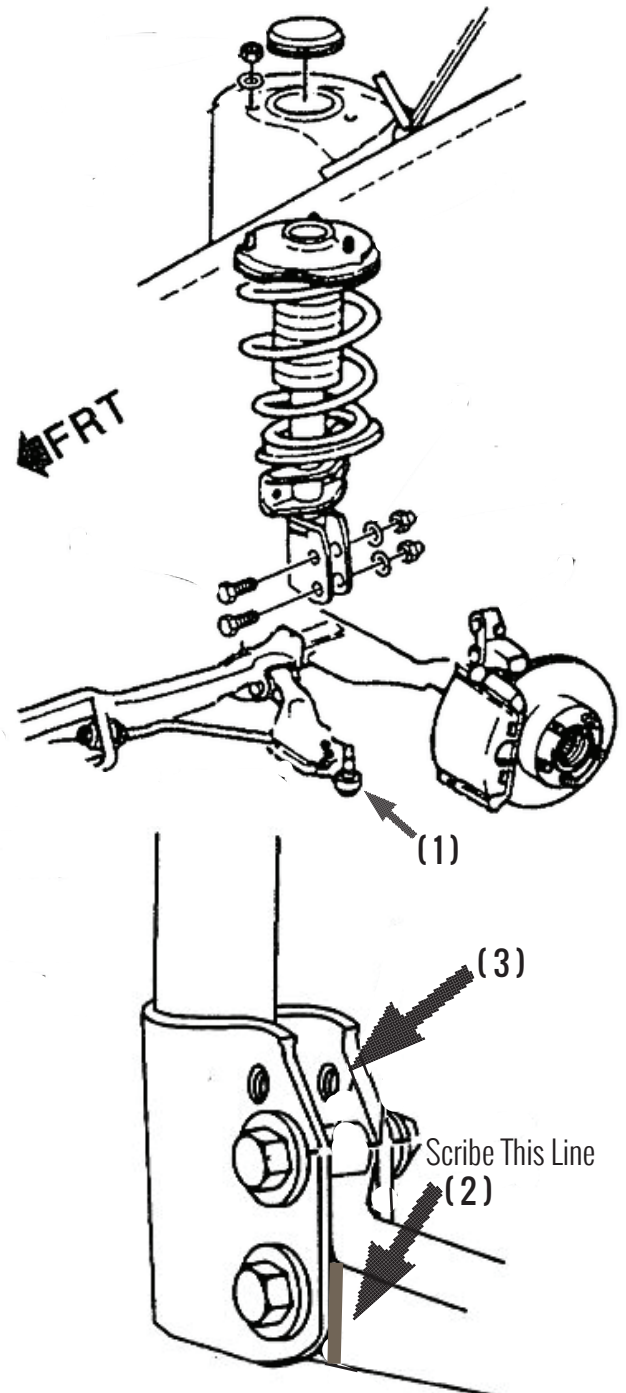
NOTICE: Whenever working near the drive axles, care must be taken to prevent inner tri-pot joints from being overextended. Overextension of the joint could result in separation of internal components which could go undetected and result in failure of the joint.

NOTICE: Care should be taken to avoid scratching or cracking the spring coating when handling the front suspension coil spring. Damage can cause premature failure.

5. Scribe knuckle and strut. (2)

Using a grease pencil trace the left line of the strut mounting tab onto the steering knuckle. This line will be used to align the new strut in the same position as the old. Failure to install the new strut correctly will result in failure aligning the new strut.

6. Remove Brake line bracket from strut. (3)
7. Remove Stabilizer link from strut.
8. Remove Strut electrical connector.
9. Remove Strut-to-knuckle bolts and support knuckle with wire. (4)
10. Remove Strut.



Installation is the reverse of removal

Disable Illumination of Service Indicator

#00-03-11-001B: Procedure to Disable Illumination of Service Indicator AFTER Installation of Passive Struts/Shocks - (Nov 25, 2009)

Subject: Procedure to Disable Illumination of Service Indicator AFTER the Installation of Passive Struts/Shocks

Models:

**92-94 Buick Skylark • 93-96 Buick Park Avenue • 89-93 Cadillac Allante • 93-95 Cadillac Concours • 91-96 Cadillac Eldorado
91-95 Cadillac DeVille • 91-95 Oldsmobile Ninety Eight • 92-93 Oldsmobile Achieva • 1994-1999 Pontiac Bonneville**

Some owners may bring their vehicles in for service with an illuminated service suspension light. The service suspension indicator lamp is telling the owner that the vehicle is due for strut/shock replacement, a maintenance item. The customer may elect to have passive struts installed in their vehicles due to repair cost savings and/or parts availability. The installation of passive shock/struts will result in handling characteristics which are the equal to a like vehicle without the computer controlled ride, with all other components such as tires, tire pressure, springs, etc. being equal. The installation of (4) new passive struts will cause the continued illumination of the service suspension indicator. If desired by the customer, the service indicator may be disabled AFTER THE INSTALLATION OF THE (4) NEW PASSIVE STRUTS, using the appropriate service procedure listed below. This bulletin DOES NOT authorize this procedure unless (4) NEW PASSIVE STRUTS WERE INSTALLED ON THE VEHICLE.

The wiring harness going to each strut and or shock assembly should be cut and taped back to clean-up the appearance both under the hood and under the vehicle.

In addition, each specific vehicle will require a modification as outlined below.

93 - 96 Eldorado + Seville:

These models require installation of a jumper harness connection. Remove the harness connector from the shock during shock replacement. Install the jumper, GM P/N 88961530. Securely tie off the jumper to the harness in order to avoid possible damage while in use. Effective repair requires four (4) jumpers - one for each "corner" of the vehicle.

Important: Do not flash the controller with the electronic shocks connected to the vehicle harness. Controller damage may occur.

Later Delco Electronics controllers must be flashed with Tech 2:

Turn the key to the on position, with the engine off. Using the Tech 2, navigate as follows:

Diagnostics/ Model Year/ Passenger Car/ Chassis/ Product Line/ CVRSS/ ALC/ Strut Removal Recalibration .

Select FO: CVRSS Recalibration.

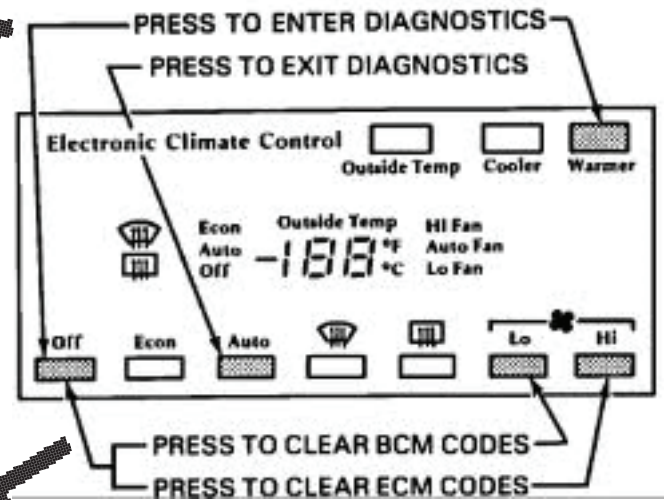
Follow all Tech 2 "on screen" instructions.

After performing the Strut Removal Recalibration procedure, cycle the ignition from "on" to "off" and then back to "on".

Verify that the ride control warning indicator is no longer illuminated.

1991 Eldorado + Seville with Computer Command Ride (CCR)

Refer to the Service Manual page, 8D-12. Set the BCM override value "BSO9" to "0" by using the warmer and cooler buttons. Store this value by pressing the "Econ" button on the Climate Control Panel and the "Instant Econ" button on the Fuel Data/Drivers Information Center for about five seconds. The new value will be stored even though the indicator does not flash. Remove the key from the ignition. Disconnect both battery cables from the battery. When both cables have been disconnected, touch the ends of the cables together and hold for five seconds. This will discharge the capacitors in the system and allow the system to perform properly when the battery cables are reconnected. Advise the customer they will have to reset all radio stations and the clock.



1992 Eldorado + Seville with Speed Sensitive Suspension (SSS)

Observe and record the IPC override "IS08" displayed value.

Use the climate control "cooler" button to decrease the value displayed for "IS08" by "8".

To store the new value, press and hold the "ECON" and "FRONT DEFROST" keys until the new value flashes on and off.

1993 Eldorado + Seville with Speed Sensitive Suspension and 4.9L Engine Only

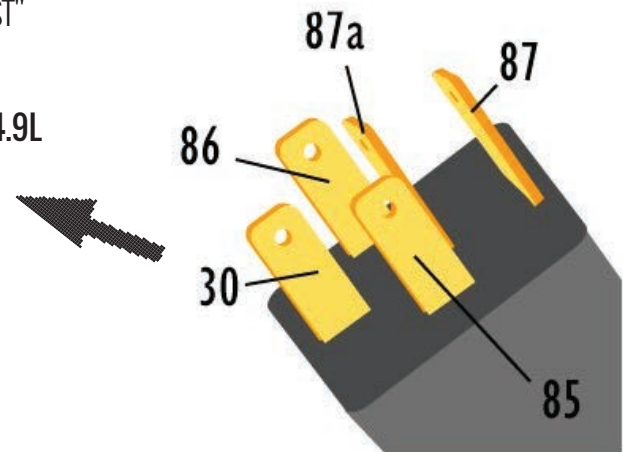
Cut circuit 1020 (PINK).

Attach the IPC side of circuit 1020 to relay pin 87A.

Attach the module side of circuit 1020 to relay pin 86.

Run a ground wire to relay pin 30.

Run a wire from a switched ignition (hot in Run) source to relay pin 85.



1991-1993 DeVille with Computer Command Ride (CCR)

The CCR module is located under the drivers seat carpet. The easiest way to access this module is to move the seat all the way forward and feel for the slit in the carpet. Unplug the harness and cut the wire while its unplugged only.

Cut **Circuit 1300 (Dark Green wire)** at the CCR module (Pin C15) to disable the indicator lamp. Tape the wires back into the harness to prevent shorting to other components.