# **INSTALL/REMOVAL INSTRUCTIONS: AIR SUSPENSION CONVERSION KIT**

**ATTENTION:** Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.

#### **Air Suspension Conversion Kit**

#### **General Installation Instructions**

When servicing any vehicle be sure to follow all safety procedures. First, make sure that when lifting the vehicle that you use an appropriate jack with a proper weight rating. Before going underneath any vehicle, make sure 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. Safety glasses and mechanic's gloves should also be worn for your protection.

Take care not to exceed the Gross Vehicle Weight Rating (GVWR), or the maximum load recommended by the manufacturer. It is important that all the vehicle owner manuals recommendations are followed for your own safety and to prevent damage to the vehicle.

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

Disclaimer:

# **Cadillac Rear Installation Instructions**

### Parts included in this kit

- 2 Rear Coil assist shocks and 2 Electronic by pass units
- 2 Rear Shocks, 2 Rear Springs, and Electronic by pass units
- 2 Rear Coil assist Shocks, 2 Rear Springs, 2 Electronic by pass units

# **Tools needed for installation**

- Metric socket set
- Support the vehicle
- Floor jack
- Jack stands
- Metric wrenches
- Wire cutter/stripper/crimping tool
- Screwdrivers (Phillips and flat head)
- Level work surface
- Spring compressor (if applicable)
- Allen wrenches

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Fig. 3

### Cadillac Rear Installation Instructions Rear Shock Removal Instructions

• Raise and support the vehicle. Remove rear wheels. (See Figures 1-2)

Fig. 1





Remove air tube from the shock.
(See Fig. 3)





• Remove two bolts securing the shock to control arm.

Note: Some models may have only one bolt securing the bottom of the shock. (See Fig. 4) Fig. 4

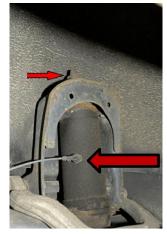


Disclaimer:

### **Cadillac Rear Installation Instructions**

• Remove upper shock nut and remove the shock from the vehicle. (See Figures 5 - 6)

Fig. 5



Remove the air line to the shock.





• Keep the old factory washer from the top of the shock as shown in Fig. 7. It will be reused

Remove the shock from the vehicle. Make Note of the shock bushings prior to removing

them from the old shock.

It will be reused

Disclaimer:

### **Cadillac Rear Installation Instructions Rear Coil Spring Removal Instructions**

- Disconnect the rear stabilizer bar from the knuckle. (See Figures 1 2)
  - Fig. 1



Fig. 2

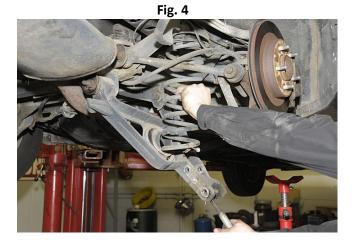


- relieve tension from pivot bolts. Remove
- Slowly lower the jack until the bolt can be removed. Remove the coil spring. (See Fig. 4)

Place the jack under the control arm to

the rear control arm bolts and nut.

(See Fig. 3)



Disclaimer:

### Cadillac Rear Installation Instructions Rear Coil Spring Installation Instructions

Read the instructions carefully before attempting the installation. Feel free to call our Technical Support Line if you have problems during the install.

**Important:** To ensure proper orientation of the spring, rest the spring (without insulators) on a flat surface. The spring will stand up straight when resting on its top end, but will lean or tip when resting on its bottom end.

• Install with the flat side up, and the pig tail at the lowest point on control arm. On the passenger side, the pig tail will point to the rear of the vehicle. On the driver's side, the pig tail will point to the front of the vehicle.



- Slowly jack up the rear control arm and replace bolt.
- Reconnect the rear stabilizer bar and lower shock mount.
- Remove the jack.



#### Disclaimer:

### Cadillac Rear Installation Instructions Cadillac Rear Shock Washer Set-up Steps

Step 1: Top Shock Bushing



**Bottom Shock Bushing** 



Step 2: Install lower bushing kit.



Step 3: Install in vehicle.



Step 4: Reuse original shock washer with new top bushing.



Disclaimer:

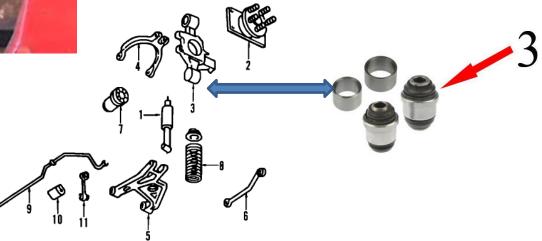
# **Cadillac Rear Installation Instructions**

• Install and tighten the lower shock bolt.



**Note:** A common area of interest on the rear of Cadillacs are the knuckle bushings. Common problems with noise and rear alignment issues are due to bad knuckle bushings.

We recommend that when installing the rear conversion kit on these vehicles also replaceing the knuckle bushings.



**Note:** The rear springs may settle some during the first couple of weeks of use. It may be necessary to adjust the front height sensors to match the level of your new rear springs.

The rear springs can sit a little low if your rear shocks are bad. Test the rear shocks by pushing down on the rear of the car. If the rear bounces, also replace the shocks.

#### Disclaimer:

### Cadillac Rear Installation Instructions Cadillac 4.9 Liter Electronic Bypass

• Remove this panel to access the control module.



• This figure shows the relay being wired to the control module harness.

Locate the plug with the arrow on the right side of the vehicle. This is the connector that the relay is wired to.



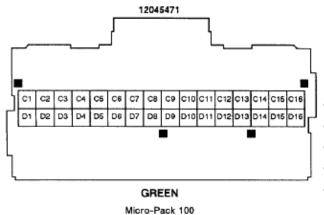


Make sure that good ground connection is made as indicated in this picture.



#### Disclaimer:

### **Cadillac Rear Installation Instructions**



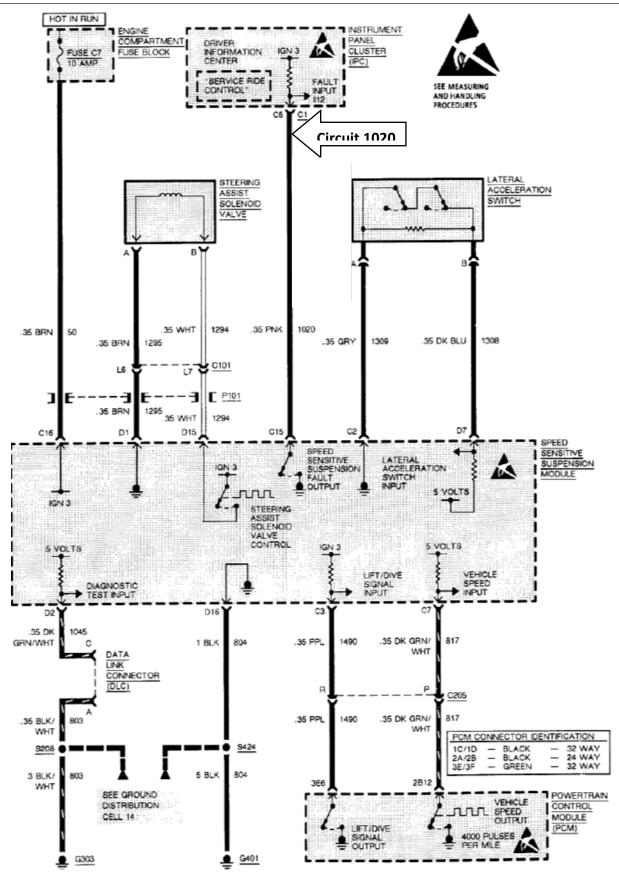
### 1993 Eldorado and Seville with Speed Sensitive (SSS)

- Locate and cut circuit 1020
- Attach the IPC side of the circuit to pin 4 (87A) of the relay
- Attach the module side of 1020 to pin 1 (86) on the relay
- Run a ground wire to pin 3 (30) of the relay
- Run a wire from switched ignition on (hot in run) to relay pin 2

#### SPEED SENSITIVE SUSPENSION MODULE

CAVITY	WIRE COLOR		DESCRIPTION	
C1	_	_	NOT USED	
C2	GRY	1309	Later Acceleration Switch Return	
C3	PPL	1490	Lift/Dive Signal Input	
C4	_	_	NOT USED	
C5			NOT USED	
C6		_	NOT USED	
C7	DK GRN/WHT	817	Vehicle Speed Input	
C8		-	NOT USED	
C9		-	NOT USED	
C10	_	-	NOT USED CIrcuit 1020	
C11	_	-	NOT USED	
C12		-	NOT USED	
C13	WHT/BLK	1006	RH Front Strut Motor Drive 7	
C14	YEL	1014	RH Rear Strut Motor Drive	Delevelavent
C15	PNK	1020	Fault Output to IPC	Relay Layout
C16	BRN	50	lgn 3	<u>, , ,</u>
D1	BRN	1295	Steering Assist Solenoid Valve Return	1.07
D2	DK GRN/WHT	1045	Diagnostic Test Input	1-86
D3	DK GRN/YEL	1016	RH Rear Strut Position Input	1 00
D4	BRN/WHT	1012	LH Rear Strut Position Input	
D5	LT BLU	1008	RH Front Strut Position Input	
D6	BRN/WHT	1004	LH Front Strut Position Input	
D7	DK BLU	1308	Lateral Acceleration Switch Input	
D8	PPL	1017	RH Rear Strut Ground	3-30 4-87A 5-87
D9	GRY/RED	1013	LH Rear Strut Ground	<u>5 50 10/11 5 0/</u>
D10	BRN	1009	RH Front Strut Ground	
D11	LT GRN	1005	LH Front Strut Ground	
D12		-	NOT USED	
D13	BLK/RED	1002	LH Front Strut Motor Drive	
D14	RED	1010	LH Rear Strut Motor Drive	2-85
D15	WHT	1294	Steering Assist Solenoid Valve Control	4-05
D16	BLK	804	Ground	

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### **Cadillac Rear Installation Instructions**

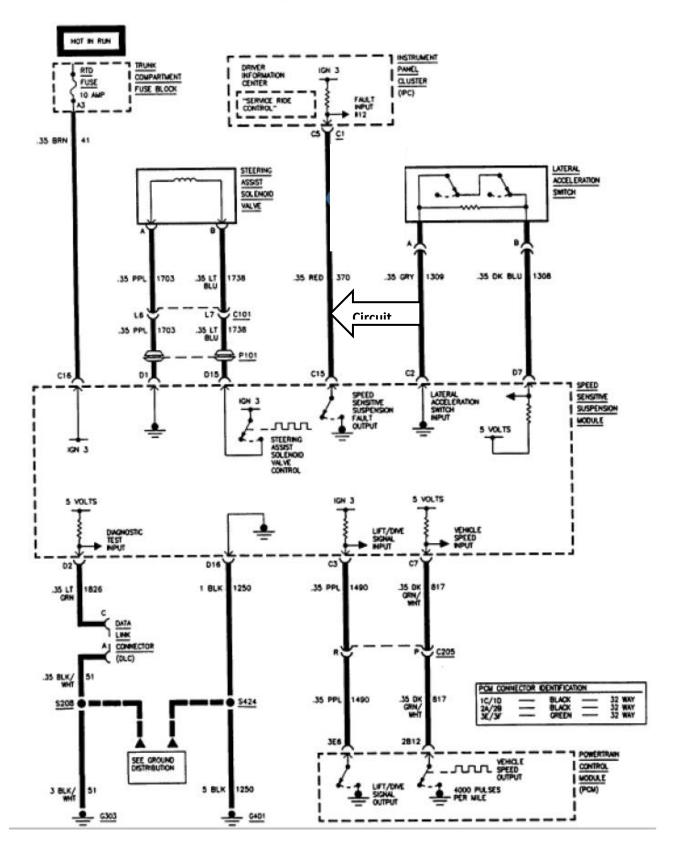
### 1994-1995 Deville 4.9 Liter

- Locate and cut circuit 370-red wire
- Attach the IPC side of circuit 370 to pin 4 (87A) of the relay
- Attach the module side of circuit 370 to pin 1 (86) of the relay
- Run a ground wire to pin 3 (30) of the relay
- Run a power wire from switched ignition on to pin 2 (85) of the relay

CAVITY	WIRE COLOR	CIRCUIT NUMBER	DESCRIPTION	
C1			NOT USED	
C2	GRY	1309	Later Acceleration Switch Return	
C3	PPL	1490	Lift/Dive Signal Input	
C4	-	_	NOT USED	
C5			NOT USED	
C6		Minine.	NOT USED	
C7	DK GRN/WHT	817	Vehicle Speed Input	
C8			NOT USED	
C9	10.00	_	NOT USED	
C10		Last	NOT USED	
C11			NOT USED	
C12		'	NOT USED	
C13	WHT/BLK	1006	RH Front Strut Motor Drive	
C14	YEL	1014	RH Rear Strut Motor Drive	7
C15	RED	370	Fault Output to IPC Circuit 370	
C16	BRN	41	Ign 3	Relay Layout
D1	PPL	1703	Steering Assist Solenoid Valve Return	
D2	LT GRN	1826	Diagnostic Test Input	1.06
D3	DK GRN/WHT	1016	RH Rear Strut Position Input	1-86
D4	BRN/WHT	1012	LH Rear Strut Position Input	
D5	LT BLU	1008	RH Front Strut Position Input	
D6	BRN/WHT	1004	LH Front Strut Position Input	
D7	DK BLU	1308	Lateral Acceleration Switch Input	3-30 4-87A 5-87
D8	PPL	1017	RH Rear Strut Ground	<u>3-30</u> <u>-0/A</u> <u>3-0/</u>
D8 D9	PPL RED/BLK	1017 1013	RH Rear Strut Ground LH Rear Strut Ground	$\frac{3-30}{1-0/A} = \frac{3-07}{2-07}$
				<u>3-30</u> <u>+-0/A</u> <u>5-0/</u>
D9	RED/BLK	1013	LH Rear Strut Ground	<u>3-30</u> <u>+-07A</u> <u>3-07</u>
D9 D10	RED/BLK BRN	1013 1009	LH Rear Strut Ground RH Front Strut Ground	
D9 D10 D11	RED/BLK BRN	1013 1009	LH Rear Strut Ground RH Front Strut Ground LH Front Strut Ground	<u>2-85</u>
D9 D10 D11 D12	RED/BLK BRN LT GRN	1013 1009 1005	LH Rear Strut Ground RH Front Strut Ground LH Front Strut Ground NOT USED	
D9 D10 D11 D12 D13	RED/BLK BRN LT GRN  RED	1013 1009 1005 	LH Rear Strut Ground RH Front Strut Ground LH Front Strut Ground NOT USED LH Front Strut Motor Drive	

#### Disclaimer:

### ELECTRONIC SUSPENSION SPEED SENSING SUSPENSION (SSS) (DEVILLE)



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