Over the course of time the suspension systems on vehicles deteriorate, sometimes to the point that you have major problems. Rubber bushings get hard, springs loose their tension and eventually these items need to be serviced. For our first tech article of 2009 we will cover how to replace the leaf springs in your classic. Along the way we will also cover other parts you should replace and show you a few tricks to make the job go smoother. This job can be done in a couple of hours and you don’t need a lift or air tools like we used, hand tools, a floor jack and jackstands will work just fine, but having them sure makes the job easier.

Tools Needed:
- 1/2” Drive Ratchet (or Air Impact) and Extensions
- 5/8” and 3/4” 1/2” Drive Sockets
- 3/8” Drive Ratchet and Extensions
- 7/16” 3/8” Drive Socket
- 9/16”, 11/16” and 3/4” Combination Wrenches
- Plastic Hammer
- Assortment of Punches
- Jackstands or a Lift
- Floor Jack or Transmission Jack
- White Lithium Grease or another quality Grease
- O-ring for the Fuel Filler Tube, Danchuk #195A

Here is the list of parts we feel should be replaced when doing this job. The quantity you need is in parentheses after the part number if more than one is needed. What you actually will replace will depend on what condition your old parts are in.

- New Springs: Danchuk #285
- Front Spring Bushings: Danchuk #065 (2)
- New Front Spring Bolt and Nut:
  - Danchuk #11294 (2)
- New Shackles:
  - Danchuk #062 (2) for 55
  - Danchuk #060 and 061 for 56-57
- Or Shackle Bushings
  - Danchuk #064 (8) for 55
  - Danchuk #063(4) and 064(4) for 56-57
- New U-Bolts: Danchuk #069 (4)
- New Spring Plates with Lower Shock Studs:
  - Danchuk #1904
- Or Shock Studs: Danchuk #14983
- New Axle Bumpers: Danchuk #861 and 862
- New Lower Axle Bumper Retainers:
  - Danchuk #2255
1.) Start by either putting the car up on the rack or lifting it up on jackstands with your floor jack. If you are using jackstands be sure that you get the car up high enough so you can wiggle the rear end out under the rear of the car if necessary.

2.) Remove the rear wheels and tires using your 1/2” drive ratchet or air impact and a 3/4” socket on the lug nuts. (Refer to Pictures 1, 2, 3)
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Picture 2

Picture 3
3.) Run your floor jack or transmission jack under the rear end and jack it up for support. Don’t put a lot of pressure on the springs, it will make removal difficult. Just enough so the rear-end is supported. (Refer to Picture 4)
4.) Using your 3/8” drive ratchet and a 7/16” socket go up into the inner fender and remove the bolt holding the top of the fuel filler tube in place. Remove the fuel filler tube by pulling it out of the gas tank, you may have to rock it a bit to break it loose. The filler tube will be in the way later so we will remove it now. (Refer to Pictures 5 and 6)
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5.) With your 3/4” socket and 1/2” ratchet or air impact remove the bolts that hold the shocks on the lower spring plate. The shocks do not have to be completely removed, just let them hang. (Refer to Picture 7)
6.) With the same 3/4” socket you used to remove the lower shock bolts remove the nuts holding the bottom shock plate to the U-bolts. Be careful to undo all 4 evenly or you could bind or twist the plate making it difficult to remove. It should drop away from the springs and U-bolts. (Refer to Picture 8)
7.) With your 11/16” and 3/4” combo wrenches, remove the nut from the bolt that holds the front of the spring to the frame bracket. Be careful with the nut as it could fall inside the frame. Then remove the nuts from the shackles in the rear with your 5/8” wrench or a socket. Remove the plate on the shackles.
(Refer to Picture 9, 10, 11)
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Picture 10

Picture 11
8.) At this point using your hammer and a punch, drive the bolt that holds the front of the spring into the spring pocket out of the spring. Make sure to have someone support the front of the spring just in case it drops out of the spring pocket….it should stay, but be on the safe side. When the bolt has been removed, pry the front of the spring out of the spring pocket and hang from the shackles, if you are using a rack, or set on the ground if you are using jackstands. (Refer to Pictures 12, 13, 14, 15)
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Picture 13

Picture 14
9.) Remove the spring from the rear shackles and set aside. You will need to adjust the height of the jack and raise the rear-end to put in the new springs, so get it up out of your way so you have room to work.
10.) Using your plastic hammer so as not to damage the threads, remove the shackle from the shackle bracket. It may be necessary to use a punch here as well. Our rubber bushings were hard, so the shackle stud came right out. Remember how the shackle was positioned so you get them back in place correctly. Remove the bushings from the shackle brackets on the frame. (Refer to Pictures 16,17,18,19)
Now you are ready to install the new springs into the car. If you are replacing the springs then the front bushing will be already pressed into the front spring eye. If you are just replacing the bushings then you will have to press the old bushing out of the front spring eye and press the new one in. This can sometimes be done with a large vise or you will need a press. We are replacing the springs, so ours is already installed.
11.) Before you start to put the car back together lubricate all the bushings and bolts, spring shackles where the bushings install and any other point that will move. This will assure that there will be no binding or squeaks. Assemble 1/2 the shackle bushings onto the shackles. (Refer to Pictures 20 and 21)
12.) Install the front of the spring in the spring pocket. You may need to use a punch to line up the holes and to get the front of the spring into place. Once you have the holes lined up, use your plastic hammer to drive the new front spring bolt into place. (Refer to Picture 22)
13.) Hang the rear shackles into position on the shackle brackets. Then raise the rear of the spring into place on the lower shackle bolt. Install the two remaining bushings into the shackles and install the plate and nuts. Tighten until snug with a 5/8” wrench or socket. Then Install the nut on the front bushing bolt. Tighten the front bushing bolt using your 1/2” ratchet or air impact and a 3/4” socket attached to a short extension on the nut, and an 11/16” wrench on the bolt head. (Refer to Pictures 23, 24, 25, 26, 27, 28, 29, 30)
14.) Now that the springs are back in place you can lower the rear end back in place. Be sure to line up the pin in the spring with the hole in the spring pad. You don’t want to install the rear-end crooked. (Refer to Picture 31)
15.) Next, remove the axle bumper and cover from the axle and replace it with your new parts. Use the plastic hammer to tap it out of the slot in the axle. Reverse the procedure to install your new one.

(Refer to Pictures 32, 33, 34)
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Picture 33

Picture 34

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16.) Hang the U-bolts over the axle, one on each side of the spring. Use the lower spring plate to line up the U-bolts into the correct position. Be sure you have the shock studs pointing the correct way or you will not be able to install the shocks. Start the nuts on the U-bolts by hand and then, using your 1/2” drive ratchet or air impact and 3/4” socket, tighten them up. You want to work slowly and tighten them evenly. Get them snug, but don’t over tighten. Make sure that the ends of the U-bolts don’t extend down below the bottom of the wheel you are using. If they do, you will have a problem if you have a blowout. (Refer to Pictures 35, 36, 37, 38)
17.) Now, replace the bumper above the axle in the middle of the floor by loosening the nut with a 9/16” combo wrench. Install the new bumper and tighten. (Refer to Pictures 39)
18.) Now you can re-install the shocks. If the shock is hanging lower than the shock bolt on the spring plate, compress the shock until it lines up with the bolt. If the spring bolt is below the shock then you will have to raise the rear-end or compress the spring until they line up. When they are in position, line the hole up with the shock bolt and tap it back into place with your plastic hammer. Be careful not to damage the shock tube in the process. Install the nut and tighten with your 1/2” ratchet and your 3/4” socket. (Refer to Pictures 40, 41)
19.) Next, install a new O-ring on the fuel filler tube, lubricate it with some grease and install it back into the gas tank. Using your 7/16” wrench, install the bolt that holds the tube to the bracket inside the fender well.
20.) Put the wheels and tires back on the car (make sure you are putting them on the same side they were on before you started) using your 1/2" ratchet or air impact and a 3/4" socket on the lug nuts and you are finished! All that is left is to lower the car back to the ground.