### " THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

**ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED** 

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

# VIII GENERAL BY Randy Irwin

### 1955-57 FRONT & REAR 2" DROP SPRINGS & QA1 ADJUSTABLE SHOCK ABSORBERS

There are several ways to lower a 1955-57. Dropped spindles work great in the front, but if the car already has disc brakes, you often need to change brake systems to be compatible with the new spindles. In addition, dropped spindle kits may cost \$400 or more. Cutting the coil springs to lower a car is never a good idea, as removing coils changes the rating of the spring and will give you a much harsher ride. To lower the rear of a leaf spring car, lowering blocks can be installed between the leaf springs and rear end housing. One problem with lowering blocks on the inside of a spring arch is that they tend to break or dislodge over time and hard use. A much better way to lower the rear is with leaf springs that have been designed to lower the car and give the same ride quality. In this article we will install a set of front 2" dropped coil springs that will work on a car with a small block, six-cylinder or big block engine and 2" drop rear leaf springs with reverse eyelets that will work on all passenger cars. Our lowering coil and leaf springs are engineered to lower the car properly and give the car a better ride than the factory springs.

#### Tools Needed:

Jack Stands Floor Jack Coil Spring Compressor 1/2" Breaker Bar Assorted Sockets Ratchet

3/8" Allen Wrench 1/2" Wrench 11/16" Wrench Tie Rod Splitter Ball Joint Splitter

#### Time Frame:

8 Hours











#### Parts Needed:

21-133 2" Front Lowering Coil Springs

21-144 5-Leaf Non-Wagon Rear Lowering Spring

21-156 6-Leaf Wagon Rear Lowering Spring

21-203 QA1 Front Adjustable Shock Absorber

21-204 QA1 Rear Adjustable Shock Absorber

21-42 1955-56 Upper Shackle Bushing

21-43 1955-57 Lower Shackle Bushing

21-34 1955 Complete Shackle Bushing Set

21-53 1956-57 Complete Shackle Bushing Set

21-70 1955 Shackle w/Bushings

21-21 1956-57 Right Shackle w/Bushings

21-22 1956-57 Left Shackle w/Bushings

21-33 1955-57 Rear End U-Bolt

21-74 1955-57 Left Shock Plate

21-75 1955-57 Right Shock Plate

To order parts call 1-800-456-1957 or visit ClassicChevy.com



**Photo #1:** Place the car on jack stands or a lift and remove the wheels and tires. We are going to lower both the front and rear so we will complete one side at a time.



Front End

Photo #2: If the car has front drum brakes, disconnect the flexible brake hose from the steel brake line on the frame. Remove the caliper from the caliper bracket and set aside. Using a tie rod splitter remove the tie rod end from the steering arm.

Photo #3: If the car has a front sway bar remove the outer sway bar end links.







**Photos #4a & #4h:** The shock absorbers are attached to the lower control arms with two 5/16" bolts and to the upper frame with one 9/16" nut. Remove this hardware and the shocks.





**Photos #5a & #5b:** A coil spring compressor should always be used when removing a coil spring. Feed the spring compressor up through the lower control arm shock absorber hole. Using an air gun or breaker bar, tighten the spring compressor until there is no load on the lower control arm.





**Photos #6a & #6b:** Remove the cotter pin and upper ball joint nut. Using a ball joint splitter, disconnect the upper ball joint from the spindle.



Photo #7: The lower control arm, coil spring and spindle will swing down, allowing the coil spring to be removed.

Photo #8: The new lowering coil springs part #21-133 are 2<sup>1</sup>/<sub>2</sub>" shorter than the stock coil springs. They have an 80-lb higher load rating than a stock coil spring. This will keep the car from bottoming out and will maintain a nice ride, unlike a cut coil spring.



Original Lowering







**Photos #9, #10a & #10b:** A coil spring compressor must be used to install the new coil springs. Place the coil spring in the lower control arm pocket. Raise the control arm and spindle assembly up to align with the upper ball joint and reinstall the upper ball joint nut. Remove the coil spring compressor.

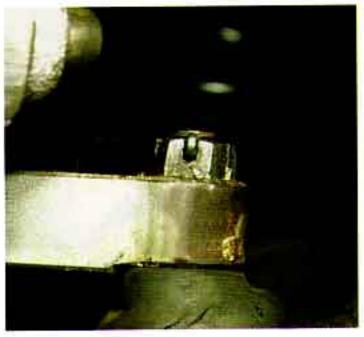


Photo #11: Install the outer tie rod end, nut and new cotter pin.

Photo #12: We are installing the new front and rear QA1 aluminum adjustable shock absorbers. These shocks have twelve different damping adjustments so you can tune the suspension anywhere from a soft ride to a very firm, high performance ride.







Photos #13a & #13b: The shock adjusting knob is located at the bottom of the shock. When the shock is installed, the adjusting knob will face outboard. A small notch will need to be cut in the lower control arm to allow the adjusting knob on the front shocks to pass through the shock absorber hole.



Photo #14: There are 12 adjustments on the shock absorber. By turning the adjusting knob clockwise, the shock will become firmer. By turning the adjusting knob counterclockwise, the shock will

become softer. You can actually feel the changes in damping by pulling the shock absorber in and out. We will initially set the adjuster at six turns to the right to see how the ride feels.





Photos #14a & #14b: At the top of the shock, install one cupped washer and one rubber grommet. Pass the shock up through the lower control arm hole and bolt it to the lower control arm.

## YOU CAN DO IT MODIFICATION

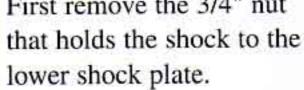


Photo #15: The top shaft of the shock absorber mounts to the top of the frame with a rubber grommet, washer and nut.

Photo #16: With the shock installed, the damping adjuster can be reached easily using a flat blade screwdriver between the coils of the spring.



Photo #17: The rear end is held to the leaf springs with two U-bolts, nuts and a lower shock plate per side. First remove the 3/4" nut







Photos #18a & #18b: Remove the four 3/4" nuts from the U-bolts and remove the lower shock plate.

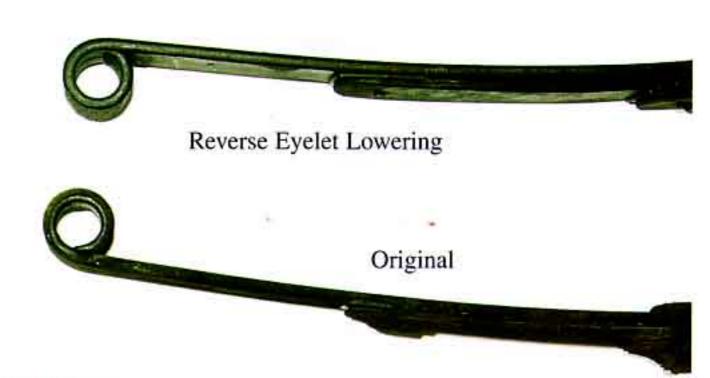


Photo #19: With the U-bolts removed raise the rear end up off the leaf springs.





**Photos #20a & #20b:** Remove the 1/2" x 4" bolt and nut that secures the forward spring eye to the frame perch.



**Photo #22:** The 5-leaf lowering leaf spring **part #21-144** is designed for all non-wagons. For wagons, Nomads and deliverys, use the 6-leaf spring **part #21-156**. The rear spring eye on the lowering spring is reversed, which lowers the ride height without de-arching the spring or changing the ride quality.



Photo #23: The new lowering springs come with a new front spring eye bushing installed. If the rear bushings in the spring need to be replaced, four part #21-43 bushings (two per side) will be needed. If the shackle to frame bushings need to be replaced, four part #21-43 (two per side) will be needed for 1955's. The 1956-57 cars use four part #21-42 bushings (two per side).

Photo #24: To install the new leaf spring, attach the rear leaf spring eye to the lower shackle stud. Use a small amount of grease on the shafts of the shackle. Install the outer shackle plate.





Photo #25: Attach the forward spring eye to the front spring hanger and tighten the original nut and bolt.

Photo #26: Lower the rear end back down onto the leaf spring and install the two Ubolts, lower shock plate and tighten the four 3/4" nuts.





Photo #27: The rear upper shock mount is the same as the upper front shock mount; install one cupped washer and one rubber grommet.





Photos #28 & #29: Install the rear shock so that the adjusting knob is inboard and is easy to reach with the tires installed. We set the damping at six turns just like the front shocks. Install the upper rubber grommet, washer and nut inside the trunk, or on the rear shock relocation bar on the frame.

Mount the wheels and tires and place the car back on the ground. Do one final check to be certain all hardware is tight. Whenever the ride height of a car has been changed, the front end will need to be realigned. After aligning the front end, take the car for a ride and tune the shock absorbers to your liking. With the big block engine in our project car we found firming up the front damping two adjustments (clockwise) really made the car feel nice and steady. For the rear, having the adjustment in the center (six turns in) feels just right. Feel free to experiment with the firmness of the shocks. If you are going on a long trip or just want to do some around town slow-speed cruising, a softer ride is usually desired. For hard cornering or an occasional drag race, tighten them up and see how the performance of your Classic improves!

Good Luck!