by Randy Irwin

1955-64 FRONT COIL-OVER SHOCK ABSORBER CONVERSION

Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

With the development of the rear coil-over shock conversion for the Tri-Fives, as seen in December 2006 Classic Chevy magazine, the next step is to convert the front end suspension to a coil-over shock. Front coil-overs improve handling and add height adjustability over stock shocks. QA1 has a very clean, simple and great looking conversion that bolts in place of the original coil spring and shock absorber and will allow you to adjust the ride height of the car from stock height all the way down to 2-7/8" lower than stock. The dampening of the shock absorber can also be adjusted for your own personal handling preference by turning the adjustment knob on the base of the shock. This conversion can be used with stock control arms or any tubular control arms that accept a stock coil spring.

Time Frame:

5-Hours

Tools Needed:

7/8" Wrench
3/4" Wrench
9/16" Wrench
1/2" Wrench
3/8" Allen Wrench

Ball Joint Splitter
Tie Rod Splitter
Coil Spring Compressor
Floor Jack

Parts Needed:

21-174 Coil-Over Conversion 1955-57
49-97 Coil-Over Spanner Wrench

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

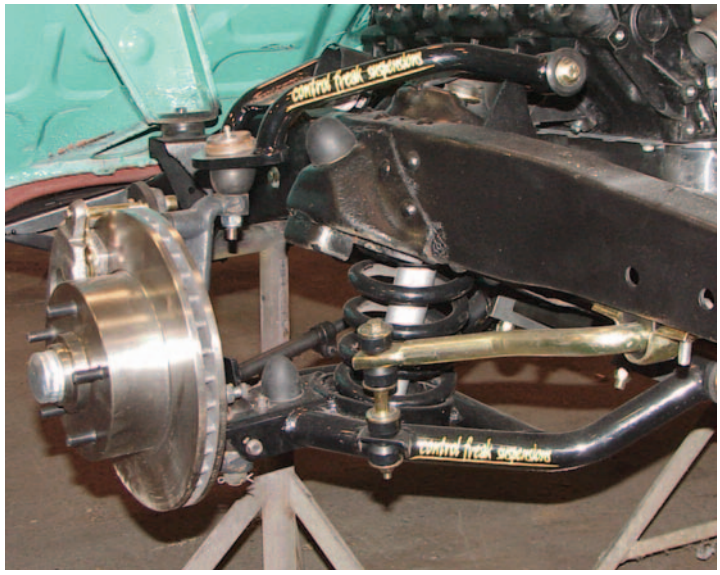


Photo #1: The stock front coil springs fit between the upper coil spring pocket on the frame and the lower control arm. Different height and rating coil springs can be installed to change the ride height of the car at home in the garage with simple tools, but have no adjustability.

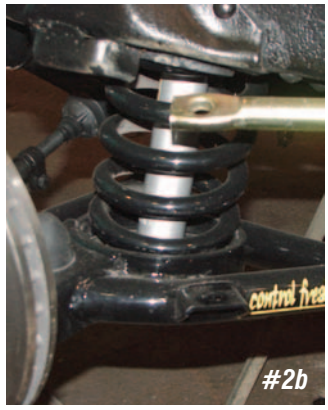


Photo #2a & 2b: To remove the coil spring, the lower control arm must be lowered out of the way. If the car has a front anti-sway bar, remove the end links that connect the sway bar to the lower control arms.

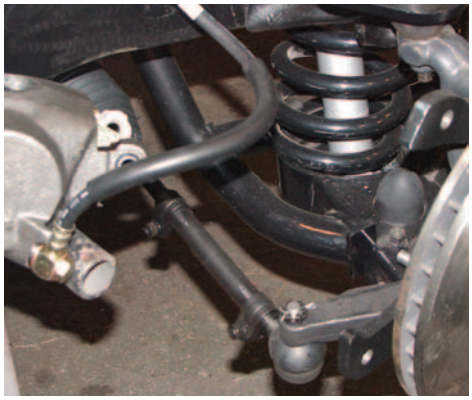
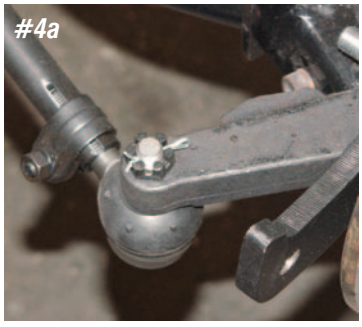


Photo #3: If the car has drum brakes, disconnect the brake hose from the hard line at the frame. If the car has disc brakes, simply remove the caliper from the caliper bracket and place it out of the way.



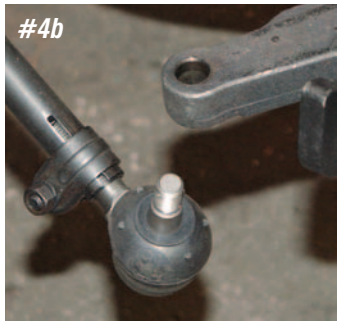
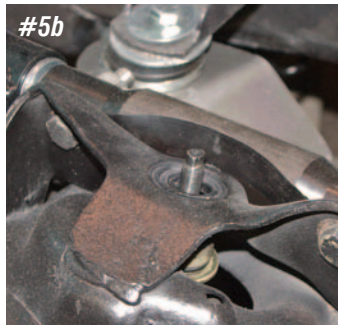


Photo #4a & 4b: Next disconnect the outer tie rod end from the outer steering arm (knuckle) by using a tie rod splitter.



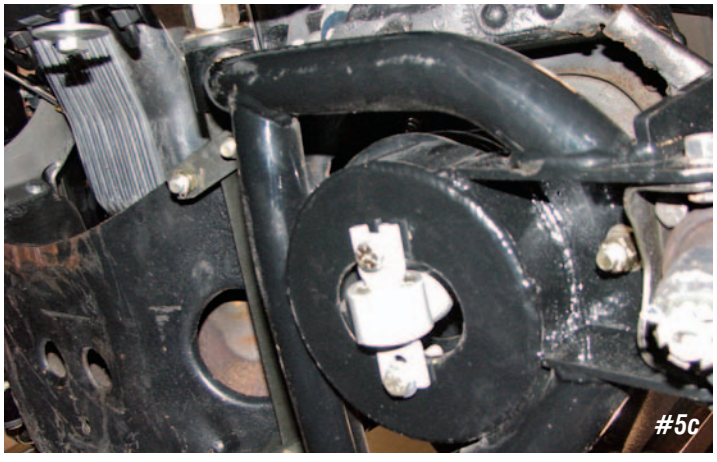


Photo #5a, 5b & 5c: The shock absorber attaches to the upper frame with a nut, washer and rubber grommet. The bottom of the shock absorber attaches to the lower control arm with two 5/16" X 1" bolts. Remove all mounting hardware and the shock will drop out through the hole in the lower control arm.

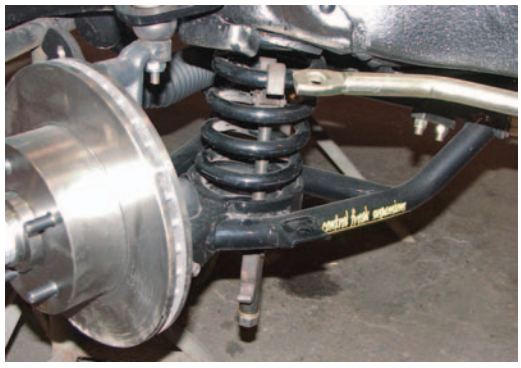


Photo #6: There is a large amount of load on the control arms when the coil spring is in place. A coil spring compressor must always be used when removing any coil spring. The coil spring compressor feeds up through the hole in the lower control arm. The arms on the compressor hook to the coil spring and will compress the coil spring and take the load off the control arms.

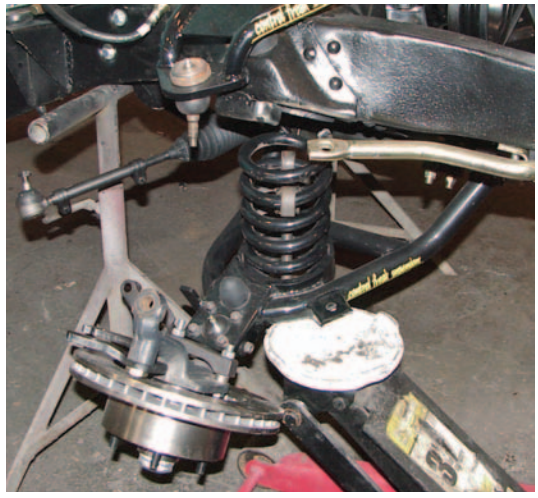
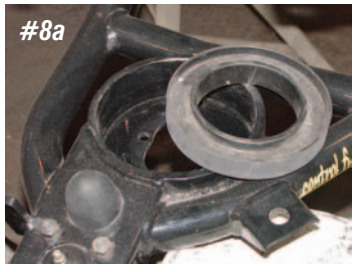
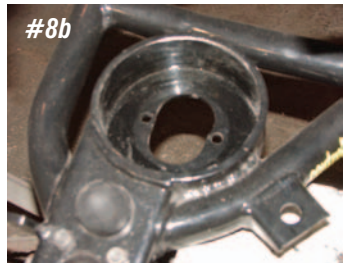


Photo #7: With the coil spring compressed, place a floor jack under the lower control arm and remove the upper ball joint nut and cotter pin. With a ball joint splitter, disconnect the ball joint from the spindle and lower the control arm with the jack. This will allow the coil spring to be removed.





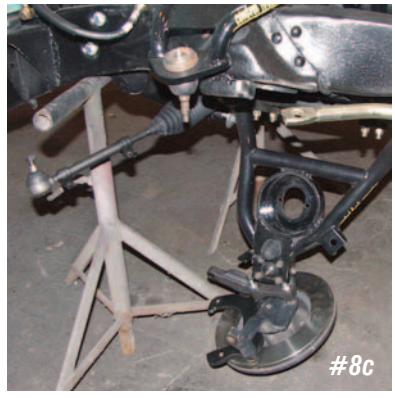


Photo #8a, 8b & 8c: If the car has tubular lower control arms, there may be a lower coil spring cushion. This cushion will need to be removed before installing the new coil-over shock conversion. On a stock lower control arm, the holes for the lower shock mount are 5/16". These holes need to be drilled out to 3/8" for the coil-over shock conversion.

Photo #9: The original coil spring measures 17-1/4" tall and has a spring rating of 320 lbs. The new QA1 coil-over shock spring measures just 10" tall and has a rating of 450lbs. With the shorter spring, a coil spring compressor will not be needed to install.

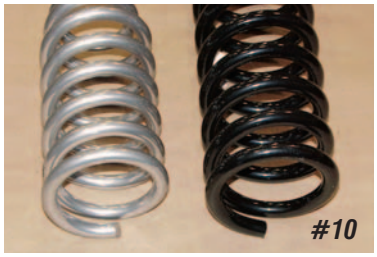


Photo #10: The top of the coil-over spring is the same diameter as a stock spring. This will allow the coil-over spring to seat in the original upper spring pocket.

Photo #11a & 11b: The body of the shock absorber is aluminum and has threads that the spring adjusting spanner nut threads onto. By adjusting the spanner nut up or down, the ride height of the car can be set at the stock height or lowered as far as 2-7/8" from the stock height. The smaller end of the coil spring sits on top of the spanner nut.

Photo #12a & 12b: The top of the QA1 shock absorber uses two washers, two rubber grommets and two nuts and attaches to the frame using the stock upper shock absorber hole.

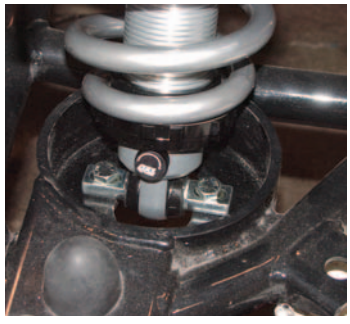
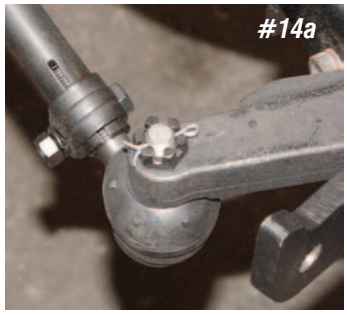
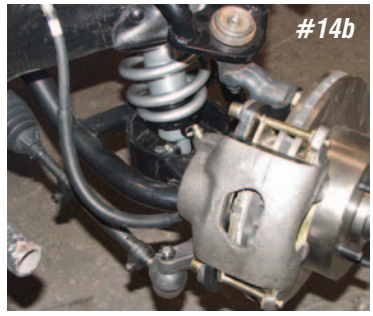


Photo #13: The lower shock mount attaches to the inside of the lower control arm using the drilled out lower shock mount holes. The coil-over shock conversion includes new 3/8" X 1" bolts and lock nuts to bolt the shocks to the lower control arm. Feed the bolts through from the top side of the control arm and bolt in place with the nuts on the bottom.





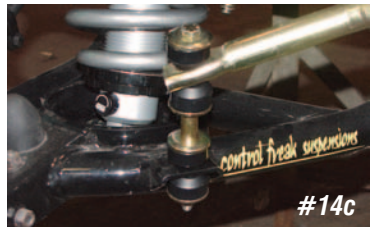


Photo #14a, 14b & 14c: With the coil-over shock installed, reconnect the outer tie rod end, the link kit for the anti-sway bar and install the brake caliper back into place.

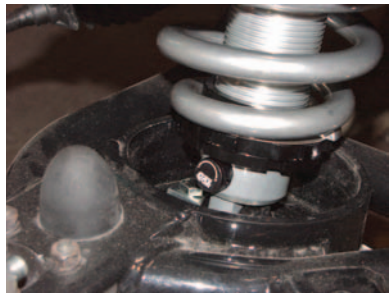


Photo #15: The dial on the QA1 coil-over shock will allow you to custom tune the dampening of the shock for your own particular taste and handling characteristics. With the dial turned all the way counter clockwise you will have a soft ride. As the dial is turned clockwise, the ride quality gets firmer and firmer all the way to "stiff."

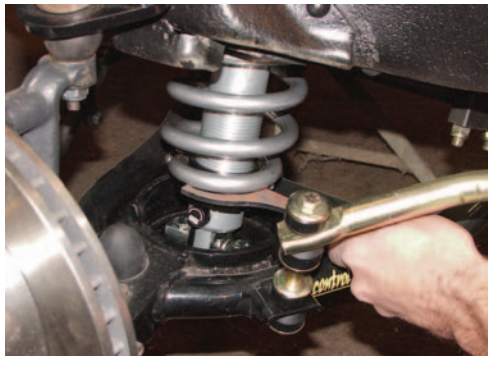


Photo #16: Using the spanner wrench **P/N 49-97**, the spanner nuts can be turned up or down to change the ride height. With the nuts turned all the way to the top, the car will be at stock ride height. With the spanner nuts turned all the way to the bottom the car will be 2-7/8" lower than stock.

With the coil-over shock conversion you will have a better ride, better handling, adjustable ride firmness and the ability to change the ride height with just the turn of a wrench. Good Luck!