



Part # 11373510 - 88-98 C1500 Front HQ Series CoilOvers



Recommended Tools





1988-1998 C1500 HQ Series Front CoilOvers

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THIS COILOVER KIT IS DESIGNED TO BE USED WITH RIDETECH STRONGARMS. THIS KIT WILL **NOT** WORK WITH OEM CONTROL ARMS.







Major ComponentsIn the box

Item #	Part #	Description	QTY
1	982-10-803	3.6" Stroke HQ Series Shock	2
2	90009989	2.75" Shock Stud (Installed on Shock) - Includes Adjuster Knob & Screw	2
3	59080850	Coilspring 8" 850lb	2
4	70010828	Delrin Spring Washer	4
5	234-15-200	Lower Spring Adjuster Nut	2
6	99050001	Adjuster Nut Locking Screw	2
7	90002070	Dropped Upper Spring Mount	2
8	038-01-006-A	CoilSpring Plate Retaining Ring	2
9	900001337	Upper Shock Mount	2
10	90002312	2" Stud Top Spacer	2
11	90001287	.5" Upper Delrin Ball Cap	2
12	90001903	Lower Delrin Ball for Shock Stud Top	2
13	90001904	Upper Delrin Ball for Stock Stud Top	2
14	99562003	9/16"-18 Nylok Nut	2
15	210-35-120-0	Adjuster Knob	2
16	90009969	4-40 x 1/4" Pan head Torx Screw	2
	70012161	2.75" Metering Rod - Installed in Stud Top	2
	90001994	5/8" ID Bearing (installed in shock body & eyelet)	2
	90001995	Bearing Snap Ring (installed in shock & eyelet body)	4







CoilOver Installation





1. Raise and support truck at a safe, comfortable working height. Let the front suspension hang freely.

2. Remove the coil spring, shock absorber, bump stop, upper control arm, and lower control arm. Refer to factory service manual for proper disassembly procedure.

3. Install the CoilOver StrongArms. Refer to the StrongArm instructions.

4. Drill the OEM shock hole out to 3/4". A Unibit stepped drill bit works well for this.

5. The CoilOvers will need to be partially disassembled to install them into the truck. To disassemble the CoilOver you need to:

a. Remove Screw (1) from center of Adjustment Knob (2) using a T10 Torx to remove Adjustment Knob.

b. Remove Nylok Nut(3), Delrin Upper Cap(4), Delrin Upper Ball(5) and Billet Upper Mount(6).

c. The Delrin Lower Ball(7) will most likely be stuck in the shock hole of the billet upper mount. Remove it for the time being.

Repeat on second CoilOver.





CoilOver Installation



6. The Aluminum Upper CoilOver Support has the center mounting hole offset as is the shock mounting hole in the frame. They will need to be test fitted in each side to check for alignment of the OEM shock hole and the shock hole in the aluminum upper mount. It may be necessary to trim the coil spring retaining fingers to get proper alignment.





7. They will need to be test fitted in each side to check for alignment of the OEM shock hole and the shock hole in the aluminum upper mount. Due to variances throughout the years of these trucks being produced, it may be necessary to trim the coil spring retaining fingers to get proper alignment. Stick the mount up in the frame pocket with the large opening down. Rotate the upper mount to get the shock holes aligned. Determine the orientation the achieves the best alignment. If the holes DO NOT perfectly align, trim the necessary coil spring fingers to get the mount in the correct position with the holes aligned.

8. We used a die-grinder with a cut off wheel to trim the fingers. On some trucks, the holes will line up without trimming

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CoilOver Installation



9. After hole alignment has been achieved, reinstall the Bottom Delrin Ball and Aluminum Upper Mount.

10. Insert the CoilOver with the Aluminum Upper installed into the OEM coil spring pocket. You may need to rotate the upper mount while inserting the assembly to get the best alignment of the shock holes.





11. Hold the CoilOver in place. Install the Upper Delrin Ball (1), Aluminum Upper Cap (2), 9/16"-18 Nylok Nut (3), Adjuster Knob (4), & Adjuster Knob Retaining Screw (5) on the Stud Top (A) that is sticking through the frame. See below for nut tightening.

TIGHTENING THE TOP 9/16"-18 NUT: SNUG THE NUT DOWN AGAINST THE TOP CAP. YOU NEED TO BE ABLE TO ARTICULATE THE SHOCK BY HAND. WE TORQUE THE NUT TO 80 INLBS USING A 7/8" CROWS FOOT WRENCH ON A TORQUE WRENCH.





CoilOver Installation & CoilSpring Adjusting



12. Insert the Bearing Spacers into the lower shock bearing. The SMALL end goes into the bearing. Swing the Control Arm up, lining up the 1/2" holes with the bearing spacers. Install a 1/2" flat washers on a $1/2"-13 \times 2 1/2"$ hex bolt, insert it through the hole. Install a 1/2" flat washer and nylok nut. Torque the hardware to 75 ftlbs.

Ride Height

We have designed most trucks to have a ride height of about 4" lower than factory. To achieve the best ride quality & handling, the shock absorber needs to be at 50-60% overall travel when the truck is at ride height. This will ensure that the shock will not bottom out or top out over even the largest bumps. Measuring the shock can be difficult, especially on some front suspensions. Measuring overall wheel travel is just as effective and can be much easier. Most trucks will have 4-6" of overall wheel travel. One easy way to determine where you are at in wheel travel is to take a measurement from the fender lip (center of the wheel) to the ground. Then lift the truck by the frame until the wheel is just touching the ground, re-measure. This will indicate how far you are from full extension of the shock. A minimum of 2.0" of extension travel (at the wheel) is needed to ensure that the shock does not top out. If you are more than 3" from full extension of the shock then you are in danger of bottoming out the shock absorber.

Adjusting Spring Height

When assembling the CoilOver, screw the spring retainer tight up to the spring (0 preload). After entire weight of car is on the wheels, jounce the suspension and roll the car forward and backward to alleviate suspension bind.

• If the car is too high w/ 0 preload then a smaller rate spring is required. Although threading the spring retainer down would lower the car, this could allow the spring to fall out of its seat when lifting the car by the frame.

• If the car is too low w/ 0 preload, then preload can then be added by threading the spring retainer up to achieve ride height. On 2.6" - 4" stroke shocks, up to 1.5" of preload is acceptable. On 5-7" stroke shocks, up to 2.5" of preload is acceptable. If more preload is needed to achieve ride height a stiffer spring rate is required. Too much preload may lead to coil bind, causing ride quality to suffer.





Shock Adjustment

Shock Adjustment 101- Single Adjustable

Rebound Adjustment:

How to adjust your new shocks.

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet. You must first begin at the ZERO setting, then set the shock to a soft setting of 20.





-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.

-Now turn the rebound adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use).

Take the vehicle for a test drive.





-if you are satisfied with the ride quality, do not do anything, you are set!

-if the ride quality is too soft increase the damping effect by rotating the rebound knob clock wise 3 clicks.

Take the vehicle for another test drive.



-if the vehicle is too soft increase the damping effect by rotating the rebound knob clock wise 3 additional clicks.

-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

Note:

One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.