

Part # 11020109 55-57 Chevy Level 2 CoilOver Suspension Package

One Piece Frame

Front Components:

1	11013509	RQ Series Front CoilOvers
1	11012899	Front Lower StrongArms
1	11013699	Front Upper StrongArms

Rear Components:

1	11027199	Rear AirBar 4 Link

1 11016509 RQ Series Rear CoilOvers

1 85000000 Spanner Wrench



Part # 11013509 55-57 Chevy RQ Series Front CoilOvers

For Use w/ StrongArms

Shock Assembly:

2	24049999	4.1" stroke RQ Series shock
2	90009986	2" threaded stud top
2	90001994	.625" I.D. bearing
4	90001995	Bearing snap ring

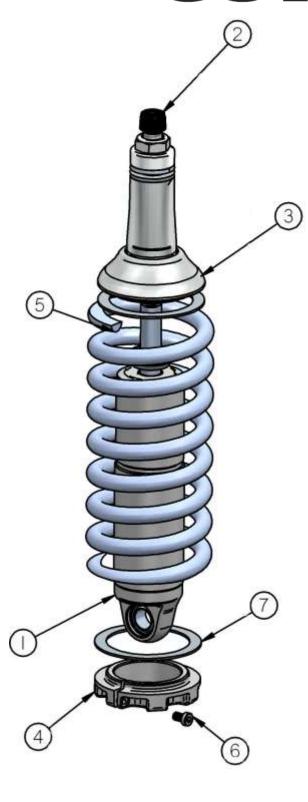
Components:

2	59100600	Coil spring – 10" long / 600 # rate
2	90002312	2" stud top base
2	90002222	Spring retainer kit (do not use standard upper spring retainer)
2	90002070	¾" drop upper spring retainer
2	90001902	Aluminum cap for Delrin ball
2	90001903	Delrin ball upper half
2	90001904	Delrin ball lower half
4	70010828	Delrin Spring Washers

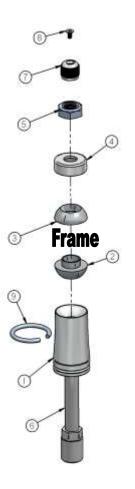
Hardware:

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2	99562003	9/16" SAE Nylok jam nut	Stud top hardware

COILOVER



- 1. Impact Forged, Monotube shock
- 2. Rebound adjustment knob (SA Only)
- 3. Upper coil spring retainer (Use ¾" dropped cap)
- 4. Lower coil spring retainer
- 5. High tensile coil spring
- 6. Set screw
- 7. Delrin Spring Washer

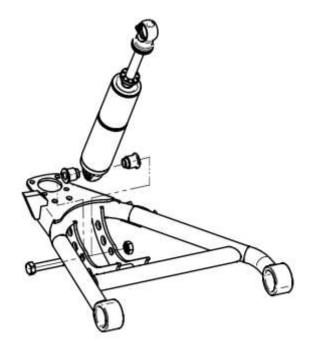


- 1. Stud top base
- 2. Lower Delrin ball half
- 3. Upper Delrin ball half
- 4. Aluminum cap
- 5. 9/16" Nylok jam nut
- 6. Threaded stud
- 7. Adjustment knob (SA Only)
- 8. Screw
- 9. Snap ring

COILOVER



- 1. To allow the step in the lower Delrin ball half to slide into the factory shock hole, the bushing cup will need to be removed and the hole may need to be drilled out to 3/4".
- 2. Assemble the CoilOver then place into the coil spring pocket w/ the stud and lower Delrin ball sticking through the factory shock hole.



- 3. Check clearance between the upper factory spring retaining lip and stud top base. Allowing this to hit could cause the shock to break, this
- 4. Place the upper Delrin ball over stud, then the aluminum cap. Secure the assembly w/ the 9/16" Nylok jam nut.
- 5. Attach the bottom of the shock to the lower StrongArms using the spacers and hardware supplied w/ the arm.



Part # 11012899 55-57 Chevy Car Lower StrongArms For Use with Shockwaves or CoilOvers

Components:

1	90000561	Driver side lower control arm
1	90000562	Passenger side lower control arm
2	90000916	Lower ball joint (includes boots, castle nuts and cotter pins)
4	90000906	Lower control arm bushing
4	90002062	Aluminum spacers for Shockwaves

Hardware:

2	99501024	½"-13 x 3 ¼" Gr. 5 bolt	ShockWave to lower arm
2	99502001	½"-13 Nylok nut	ShockWave to lower arm



Installation Instructions

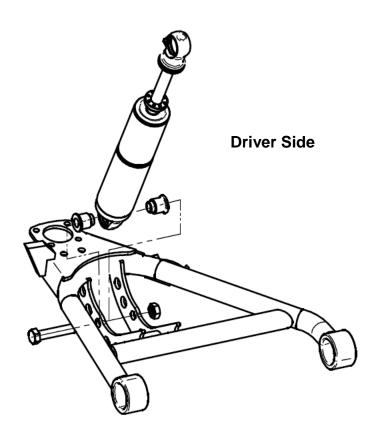


1. Remove factory cross shafts from lower arm and install the factory cross shaft onto the lower StrongArm using the factory hardware. Some grinding must be done on the cross shaft to be able to slide it into the StrongArm. Replacement bushings are provided.

Note: There is a driver and passenger side lower cross shaft. The extended length of the shaft should go to the front of the vehicle.



- 2. Install the ball joints in the lower arm pointing down.
- 3. Bolt the lower StrongArm to the car using the oem bolts. Note that the sway bar mount will face toward the front of the vehicle.



4. Bolt the Shockwave or CoilOver to the lower arm using the supplied 1/2" x 3 1/4" bolt and Nylok. An aluminum spacer on both sides of the eye will center the Shockwave.

Note: There are holes on the lower arm near the ball joint to mount the factory bump stop. Although, it is not needed unless you are having tire clearance issues.

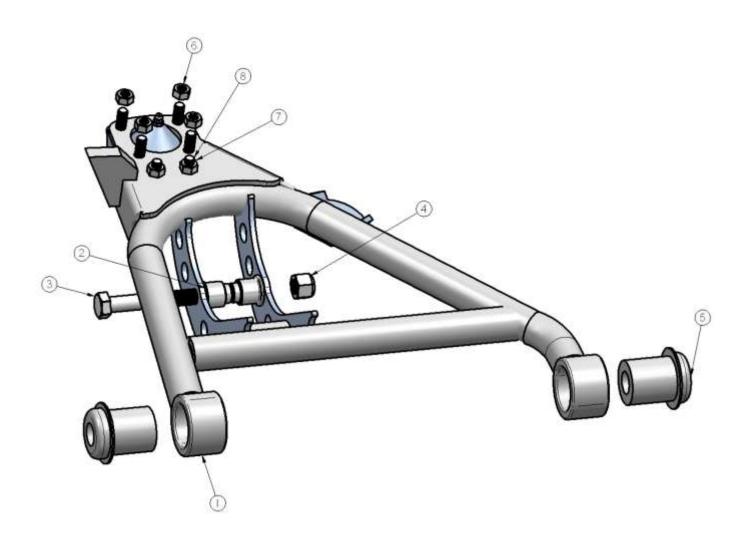
5. Slide the ball joint through the spindle and secure w/ castle nut and cotter pin.



- 6. Grease the ball joints.
- 7. Double check air spring clearance through full suspension travel. If any part of the Shockwave touches the frame at anytime it will damage the unit. This is not a warrantable situation.



Item #	Description	
1.	Passenger side arm	1
1.	Driver side arm	1
2.	Aluminum bearing spacer	4
3.	1/2"-13 x 3 1/4" bolt	2
4.	1/2"-13 Nylok nut	2
5.	Cross shaft bushing	4
6.	Ball joint	2
7.	5/16"-24 nut	8
8.	5/16"-24 x 3/4" bolt	8





Part Number 11013699 55-57 Chevy Upper StrongArms

Components:

1	90000541	Driver side upper arm
1	90000542	Passenger side upper arm
2	90000905	Ball joint (includes boot, grease fitting, castle nut & cotter pin)
4	90000907	Cross shaft bushing
4	90000543	Upper cross shaft large sleeve
4	90000544	Upper cross shaft small sleeve

Hardware:

4	99371015	3/8"-24 x 1 ½" bolts	Upper cross shaft
4	99373005	3/8" lock washers	Upper cross shaft



Installation Instructions



- 1. Remove the upper control arm and cross shaft. The factory cross shaft will be reused.
- 2. Place the larger sleeve over the end of the upper cross shaft, slide the cross shaft through the StrongArm. Then press the bushing over the shaft. Insert the smaller sleeve inside the bushing and tighten the assembly with the 3/8"-24 x 1 1/2" bolts.
- 3. Install the ball joint into the upper StrongArm also facing down.

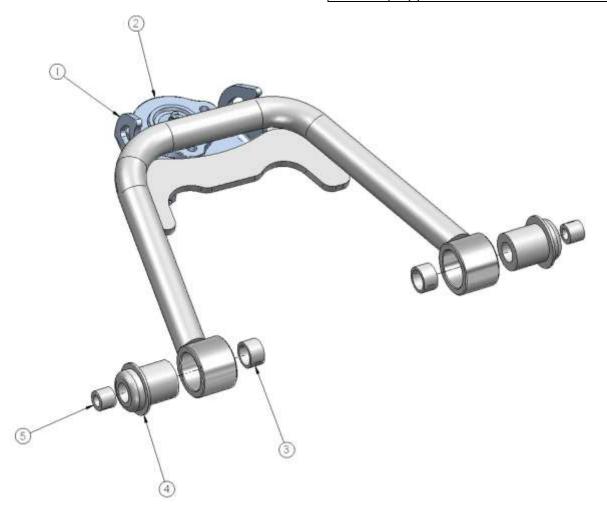


- 4. Bolt the upper StrongArm to the frame and spindle using the factory frame bolts.
- 5. The upper control arm bump stop is reused.
- 6. Grease the ball joints.



55-57 Chevy Upper StrongArm

Item #	Description	Qty.
1.	Passenger side arm	1
1.	Driver side arm	1
2.	Ball Joint	2
3.	Upper Cross shaft Large Sleeve	4
4.	Cross shaft bushing	4
5.	Upper Cross shaft Small Sleeve	4





Part # 11016509 55-57 Chevy RQ Series Rear CoilOvers For Use w/ AirBar

Shock Assembly:

2	24049999	4.1" stroke RQ Series shock
2	90002021	1.7" eyelet
4	90001994	.625" I.D. bearing
8	90001995	Bearing snap ring

Components:

2	59100200	Coil spring – 10" long / 200 # rate
2	90002222	Spring retainer kit (do not use upper spring retainer)
2	90002070	3/4" drop upper spring retainer
4	90002043	Aluminum spacer for upper bearing
4	70010828	Delrin Spring Washer



Ride Height

We have designed most cars to have a ride height of about 2" lower than factory. To achieve the best ride quality & handling, the shock absorber needs to be at 40-60% overall travel when the car 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 cars 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 car 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 1.5" 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.

Assembly...



First using the supplied lower adjuster nut(90002222) thread the nut onto the shock from the bottom side as seen in figure 1



Next install delrin washers then coil spring over the top of the shock as seen in figure 2



Before the upper spring mount can be installed screw the adjuster knob on the upper eye mount to the firmest setting (clockwise) as seen in figure 3.



Slide the Derlin washer over the spring, Next slide the upper spring mount (90002222) over eyelet as seen in figure 4.



Install upper spring mount retainer clip (90002057) into the groove on the upper eyelet as seen in figure 5. Then reinstall adjuster to complete assembly.



The included set of bearing spacers (900002044) are used to adapt the coil-overs to just about any application. The supplied spacers allow the coil-overs to accept 5/8" or 1/2" bolts.