



DON'T FORGET
These instructions can be found in
color and expandable at QA1.net

Technical Support Line: (952) 985-5675 Email: sales@QA1.net

INSTALLATION INSTRUCTIONS

QA1 P/N GS518-12800, GD518-12800 (2WD)
GS518-10950, GD518-10950 (4WD)
'07-'18 Silverado Front Pro Coil System

TOOLS AND SUPPLIES REQUIRED

- Floor Jack
- Two (2) Jack Stands
- SAE Wrench Set
- Ratchet & Metric Socket Set
- Torque Wrench
- Anti-seize

PRE INSTALLATION NOTES:

The ride height range for this coil-over is 1"-3" lower than stock with the factory spindle and 2.5"-4.5" lower with a drop spindle. Offset upper control arm bushings (SPC part number 86350) may be required on vehicles with factory height spindles lowered more the 2.5" to align within the factory specifications."

DISASSEMBLY INSTRUCTIONS

- 1) Measure the vehicle ride height from the ground to the lip of the fender through the center of the wheel as a record of the original ride height.
- 2) Raise and support the vehicle by the frame with jack stands on a stable surface and remove the front wheels.
- 3) Remove the tie rods from the spindles using a 19mm socket.
- 4) Remove the sway bar end links using a 15mm socket.
- 5) Unplug the ABS sensor at the frame mounted plug near the brake line junction.
(Figure 1)



NOTE:

Continue with the following disassembly instructions if drop spindles will also be installed with the QA1 coil-overs. **If reusing your factory spindles with the QA1 coil-overs, skip to disassembly step 12.**

- 6) Using a flat head screwdriver, remove the cap covering the axle nut.
- 7) Remove the axle nut using a 36mm socket, followed by the large washer under the nut.

NOTE:

Cleaning the threads of the ball joint studs is highly recommended for this application as the castle nuts may seize during removal. Lubricate and clean the threads of the ball joint studs before moving forward. The use of a size T50 (upper ball joint) and a T40 Torx bit on the lower ball joint stud will aid in disassembly.

- 8) Loosen the upper ball joint using an 18mm socket and the lower ball joint with a 24mm socket. **Do not remove the nuts at this time.**

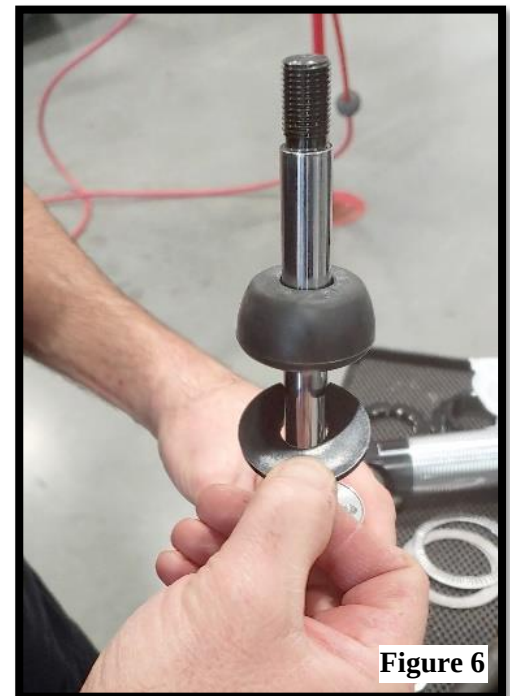
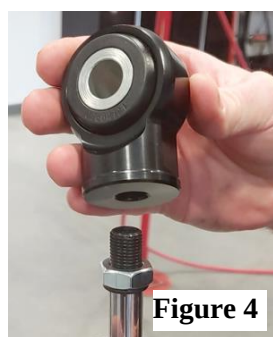


- 9) Remove the brake calipers by removing the caliper brackets using an 18mm socket. Secure the brake calipers out of the way. Do not let the calipers hang by the brake lines as this will damage the lines.
- 10) Remove the brake rotors.
- 11) Remove the wire mounts from the upper shock mount and loosen the three upper spring plate nuts using a 18mm wrench. **(Figure 2)** Leave these nuts threaded on the shock mount until step 15.
- 12) Loosen the lower control arm mounting bolts to allow more movement in the arm and more room to remove the shock/spring. The lower control arm hardware will not need to be fully removed, just loosened.
- 13) Support the lower control arm with a floor jack to contain the spring pressure.
- 14) Remove the upper ball joint nut. **(ONLY IF SWAPPING SPINDLES DURING THIS INSTALLATION)**
- 15) Remove the three upper spring plate nuts located on top of the spring pocket.
- 16) Slowly lower the jack supporting the lower control arm to release all spring pressure. The three studs in the upper spring plate should be dropped out of the spring pocket to ensure no further spring pressure is present.
- 17) Loosen and remove the lower shock mounting bolts from the lower control arm using a 15mm socket.
- 18) Remove the shock and spring from the vehicle.
- 19) **(ONLY IF SWAPPING SPINDLES)** Support the spindle and remove the lower ball joint nut. Both ball joint studs are facing down. Do not let the spindle fall when removing the lower ball joint castle nut.



SHOCK ASSEMBLY:

- 1) Loosen the jam nut under the upper shock eyelet and unthread the eyelet from the shock. **(Figures 3 & 4)**
- 2) Slide the rubber bump stop onto the shock rod as shown. Lubricating the bore of the bump stop will aid in the installation. **(Figure 5)**
- 3) Install two 1/8" packer shims under the bump stop on the shock rod. **(Figure 6)** These 1/8" shims will prevent the coil spring from going into bind. Adding additional shims will be covered later in these instructions, but all ride heights will use two 1/8" shims under the bump stop.
- 4) Lightly coat the bottom portion of the shock threads with Permatex Anti-Seize.



5) Thread the aluminum locking collar (shoulder up) onto the shock, followed by the spring seat collar (shoulder up) down to the bottom shock thread - NO FURTHER. (Figure 7)

6) QA1 highly recommends using the optional Thrust Bearing Kit (QA1 P/N 7888-109) for ease of adjustment. If the thrust bearing kit is used, coat both sides of the washers with **Permatex® Anti-Seize lubricant**. Install the stainless-steel spring seat washer, followed by the bearing and finally, the second washer. When complete, the thrust bearing kit will resemble a “needle bearing sandwich”. When using the thrust bearing kit the stainless steel washer that came with your shock will not be needed.

7) Install the coil spring onto the shock.

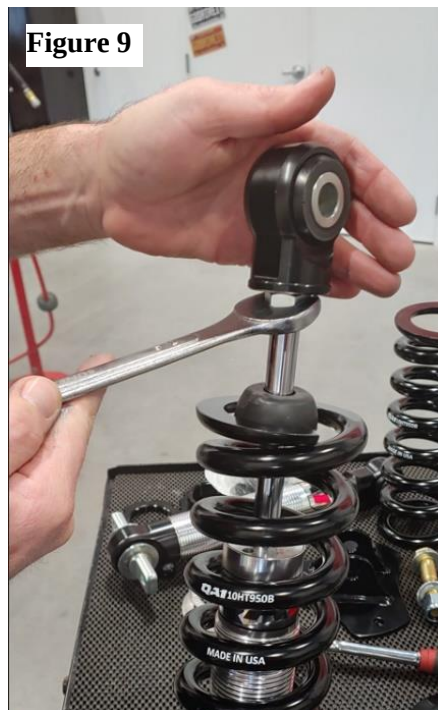
8) Make sure any/all shock adjustment knobs are on the softest setting (counterclockwise until the knob stops).

9) Pull the shock rod out of the shock to give enough room to install the packer shims under the rubber bump stop.

10) Install the upper spring cap onto the shock.

11) Fully thread the shock eyelet back onto the shock rod and hand tighten the jam nut against the eyelet. Hold the loop by the flats with a wrench or vice and tighten the jam nut an additional 45 degrees. (Figures 8 & 9)

12) Install the upper mounting plate to the upper shock eyelet using 5/8" x 3" bolt, with two washers and one nyloc nut. (Figure 10) Torque to 150 lb. ft.



PACKER SHIMS:

This coil-over kit comes with packer shims that will need to be added to the shock rod (under the rubber bump stop) dependent on the amount of drop desired. These shims serve the purpose of not allowing the spring to coil-bind. The packer shims snap on and off the shock rod with the exception of the 1/2" tall shim, which is only used on 4wd trucks lowering 1"-2" below stock.

- 13) Install the appropriate amount of packer shims onto the shock rod dependent on the desired ride height. **(Figure 11)** These packer shims snap on/off the shock rod. After the final ride height adjustments are made, measure the shock at ride height using **Figure 12**. Add the corresponding packer shim thickness under the rubber bump stop to the shock length measured.

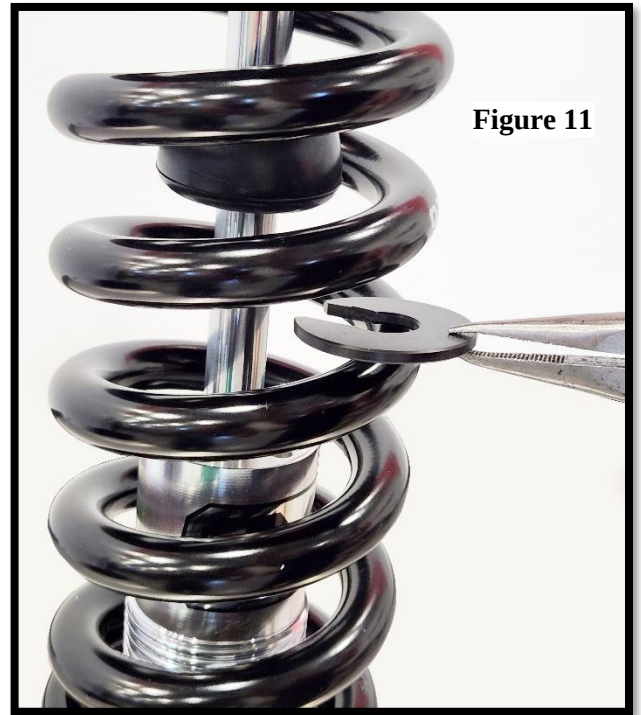


Figure 11

2wd Trucks:

TABLE 3		
PACKER ADJUSTMENT TABLE - 2WD		
"A" MEASUREMENT	TOTAL PACKER HEIGHT	1/8" PACKERS
0" - 1 5/16"	1/4"	2
1 3/8" - 1 7/16"	3/8"	3
1 1/2" - 1 9/16"	1/2"	4
1 5/8" - 1 11/16"	5/8"	5
1 3/4"	3/4"	6

With the truck at the desired ride height, measure from the bottom of the locking collar to the bottom of the shiny shock body.

4wd Trucks:

TABLE 4			
PACKER ADJUSTMENT TABLE - 4WD			
"A" MEASUREMENT	TOTAL PACKER HEIGHT	1/2" PACKERS	1/8" PACKERS
2" - 2 5/8"	1/4"	0	2
2 11/16" - 2 3/4"	3/8"		3
2 13/16" - 2 7/8"	1/2"		4
2 15/16" - 3"	5/8"		5
3 1/16" - 3 1/8"	3/4"	1	2
3 3/16" - 3 1/4"	7/8"		3
3 5/16" - 3 3/8"	1"		4
3 7/16" - 3 3/4"	1 1/8"		5

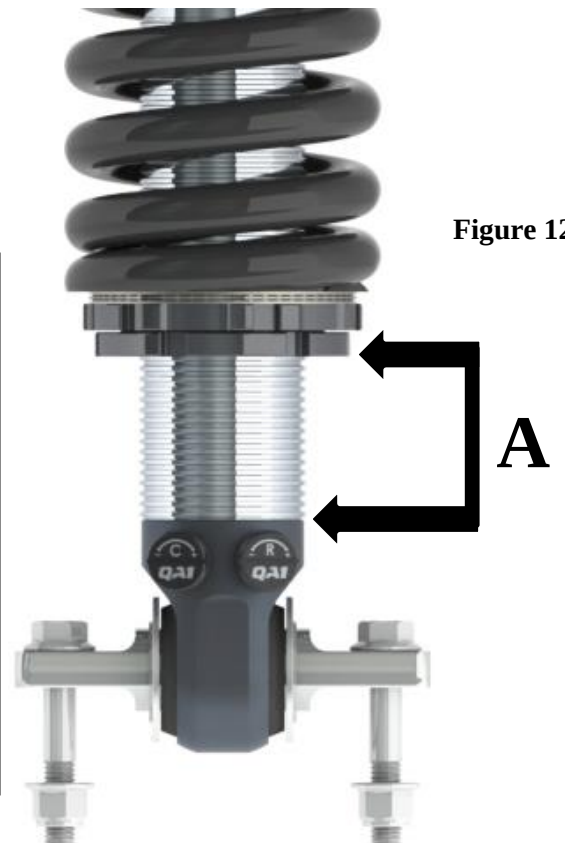


Figure 12

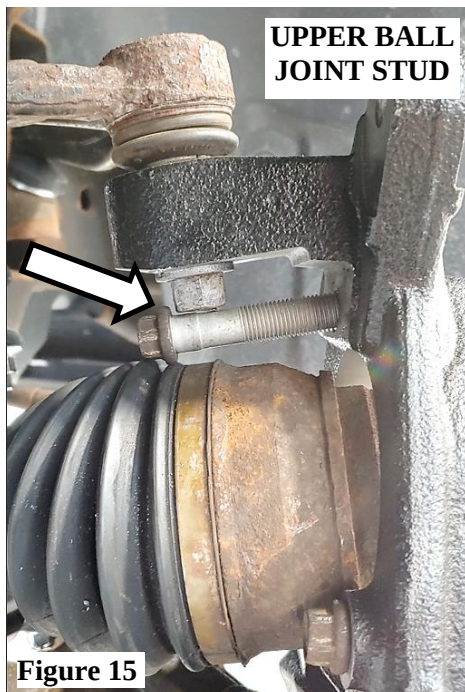
- 14) Install the included droop stop with thick washer between the droop stop and the mount. **(Figure 13)** secure with the included 3/8" washer and nut. Torque to 31 lb. ft.
- 15) Install the upper mounting plate to the vehicle with the single, unflanged bolt hole between the mounting tabs facing outboard. **(Figure 14)**



NOTE FOR CUSTOMERS INSTALLING DROP SPINDLES:

Install the hub to the drop spindle **before** attaching the spindle to the upper ball joint or the top hub bolt will not be able to be installed. **(4x4 MODELS ONLY)** **(Figure 15)** After both castle nuts are installed onto the ball joints, the excess stud length of the UPPER (4x4 Models with drop spindles only) will need to be cut down to make room for the hub bolt to be installed. Lower ball joint studs will need to be cut down (only when using drop spindles) as to not interfere with the factory size wheel. **(Figures 16)** **This step will not be needed unless drop spindles are installed.**

4x4 Models w/Drop Spindles



- 16) Raise the spring seat collar by hand up the shock body until the spring is not loose.
- 17) Install the lower t-bar shock mount to the lower control arm using the flanged M10 x 1.5" bolt and one nyloc nut per connection. **(Figure 17)**
- 18) Raise the spring seat collar so that 3" of shiny shock body threads are below the adjustment collars. The collars will be close to the front axles on 4wd models but will gain clearance as the truck is set down and the suspension is compressed. 3" of threads under the collars should be a good starting point before making final ride height adjustment on all models. **(Figure 18)**
- 19) Reinstall the ABS sensor, tie rods, sway bar end links and brakes before setting the truck on the ground to check the ride height. Make adjustments to the spring seat collars using T114W or T115W spanner wrenches. Adjustments should only be made with the weight off of the front suspension. When setting the truck down to check the ride height, roll the truck back and forth to settle the suspension before measuring. A typical suspension will settle 3/8". Once the desired ride height is achieved, snug the lower locking collar into the spring seat collar.



A professional four-wheel alignment is required before driving the vehicle.

<u>Front Shock Valving Adjustments</u>			
<i>Shocks with one adjuster knob:</i>		<i>Shocks with two adjuster knobs:</i>	
		<i>Compression</i>	<i>Rebound</i>
Drag Racing:	0-6 clicks	12-18 clicks	0-6 clicks
Nice ride and handling:	2-6 clicks	2-6 clicks	3-8 clicks
Firm ride & improved handling:	6-12 clicks	6-12 clicks	8-14 clicks
Aggressive handling:	13-18 clicks	13+ clicks	14-18 clicks

Important Notice Regarding ADAS: This product may affect the operation of your vehicle's ADAS, such as lane departure warning systems, automatic emergency braking systems, and adaptive cruise control systems. It is the responsibility of the installer to ensure that the ADAS systems are properly recalibrated after installation. Failure to do so may result in the ADAS systems not operating as intended and could potentially lead to a collision or other safety hazards. By purchasing and installing this product, you acknowledge and accept the risks associated with modifying your vehicle's suspension and potentially affecting its ADAS systems.



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READ ALL INSTRUCTIONS CAREFULLY AND THOROUGHLY PRIOR TO STARTING INSTALLATION. PRODUCTS THAT HAVE BEEN INSTALLED ARE NOT ELIGIBLE FOR RETURN. USE THE PROPER JACKING LOCATIONS. DEATH OR SERIOUS INJURY CAN RESULT IF INSTRUCTIONS ARE NOT CORRECTLY FOLLOWED. A GOOD CHASSIS MANUAL, AVAILABLE AT YOUR LOCAL PARTS STORE, MAY ALSO AID IN YOUR INSTALLATION.

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