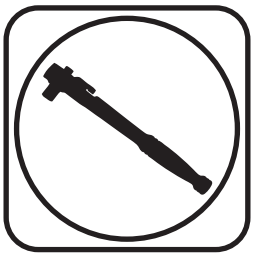
ridetech

Installation Instructions

Part # 11723110/11723115

2019-2026 Silverado 2wd/4wd
2021-2026 GM SUV 2wd/4wd

Recommended Tools



Front HQ Coil-Overs

Installation Instructions

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THIS KIT IS DESIGNED TO REPLACE THE OEM SHOCK/SPRING SETUP.

CoilOver Dimensions:

Center of bearing to Center of bearing:

Compressed:	**12.23”**
Ride Height:	**14.875” - 15.50”**
Extended:	**17.43”**

www.ridetech.com

REV6 1/29/26

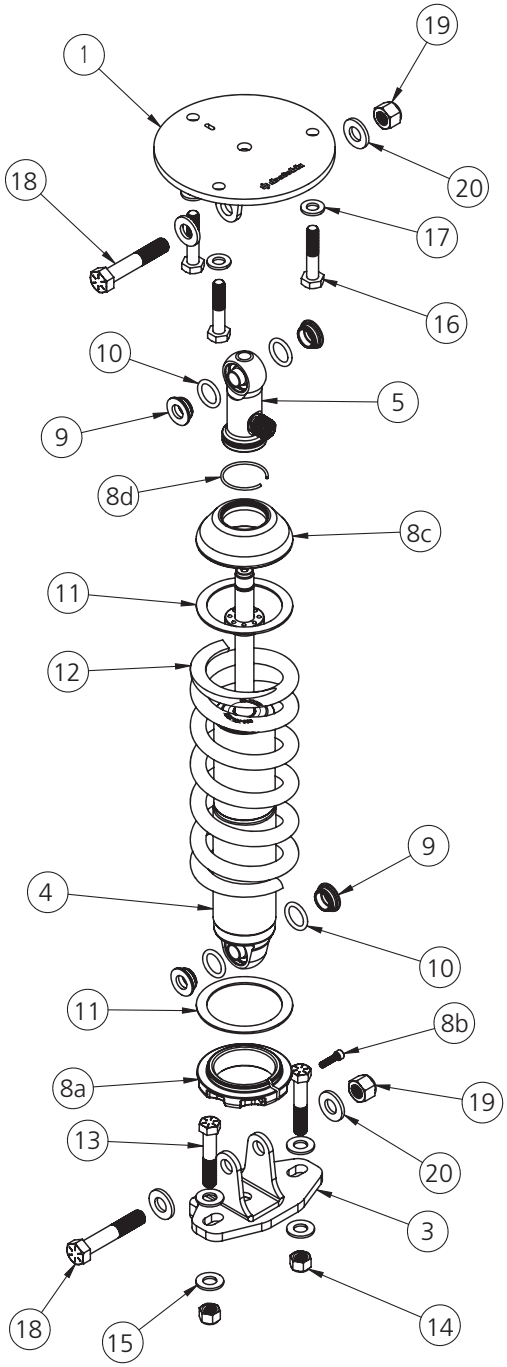
Major Components .....In the box

Item #	Part #	Description	QTY
1	90003435	Upper CoilOver Mount Assembly	2
2	90003436	Lower CoilOver Mount Assembly - Driver	1
3	90003437	Lower CoilOver Mount Assembly - Passenger	1
4	982-10-805	5.2" Stroke HQ Series Shock	2
5	90002025	2.7" Shock Eyelet Assembly	2
6	90001628	1/2" ID Bearing (installed in shock eyelet/body)	4
7	90001995	Bearing Snap Ring (installed in shock eyelet/body)	8
8a	90001447(kit)	Lower Spring Adjuster Nut - 234-15-200	2
8b	90001447(kit)	Adjuster Nut Locking Screw - 99050001	2
8c	90001447(kit)	Upper CoilSpring Retaining Plate - 90002070	2
8d	90001447(kit)	CoilSpring Plate Retaining Ring - 038-01-006-A	2
9	90003929	Shock Bearing Spacers - O-Ring Counterbore	8
10	99007210	#210 Buna O-Ring 1/8" x 3/4" x 1"	8
11	70010828	Delrin Spring Washer	4
12	59120550 (2WD) or 59100650 (4WD	Coilspring 12" (2WD) 550lb - 2WD or Coilspring 10" (4WD) 650lb - 4WD	2 or 2

HARDWARE LIST Kit # 99010214

Item #	Part Number	Description	QTY
	LOWER MOUNT		
13	99431033	7/16"-14 x 2 1/4" Hex Bolt	4
14	99432010	7/16"-14 Nylok Nut	4
15	99433005	7/16" SAE Flat Washer	8
	UPPER MOUNT		
16	99111009	M10-1.5 x 50mm Hex Bolt	6
17	99113002	M10 Flat Washer	6
	SHOCK TO SHOCK MOUNTS		
18	99501064	1/2"-13 x 2 3/4" Hex Bolt	4
19	99502009	1/2"-13 Nylok Nut	4
20	99503014	1/2" SAE Flat Washer	8

Major Components .....In the box



Alignment Note.....

THE LOWER YOU SET THE FRONT RIDE HEIGHT OF YOUR SILVERADO, THE HARDER IT WILL BE TO GET AN ALIGNMENT THAT IS WITHIN SPECIFICATIONS.

Disassembly

This CoilOver System is Designed to replace the factory Shocks and Springs.

The front OEM Shock and Spring assemblies will need to be removed from the front of the truck. **DO NOT DISASSEMBLE THE SHOCK/SPRING ASSEMBLY**.

1. Raise the vehicle and support it by the frame, allowing the suspension to hang freely.

2. You will need to raise and lower the suspension to simplify installation. We use a jack to do this.

3. If replacing the upper control arms, replace them in conjunction with the coilovers.

Getting Started.....

4. The CoilOvers need to be assembled before putting the shocks in the mounts. Assemble the shocks and springs using the instructions below.

NOTE: The Upper Mounts are not side specific so they are the same for both sides of the truck.

CoilOver Assembly...

First, using the supplied lower adjuster nut (803-00-199) thread the nut onto the shock from the bottom side as seen in figure 1. Remove the plastic pellet that is in the split of the adjuster nut.

Next, install a delrin washer 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. Then remove the Knob by holding it while removing the center screw.

Once the knob is removed slide a Delrin washer over the eyelet. Next, slide the upper spring mount (803-00-199) over eyelet as seen in figure 4.

Install upper spring mount retainer clip (803-00-199) into the groove on the upper eyelet as seen in figure 5. Then, reinstall adjuster to complete assembly.

Install the locking screw in the adjuster nut before setting spring preload, but DO NOT tighten until the spring preload has been set.

NOTE: Remember to adjust the shock valving before driving, the shock is currently set to full stiff.

Disassembly

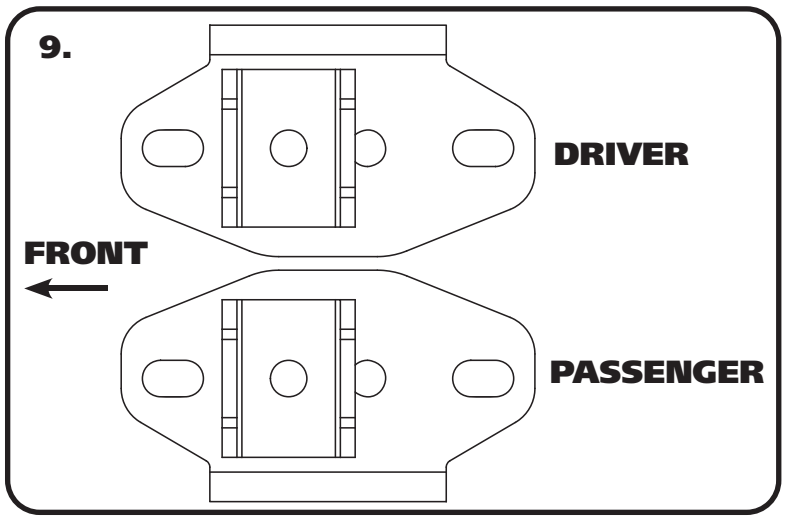
5. With the suspension supported with a jack, remove the 3 upper shock/spring retaining nuts. Retain the factory retaining nuts. They will be reused.

6. Remove the lower nut from the lower sway bar linkage. This will allow the suspension to be lowered easier for CoilOver removal and installation.

7. Remove the 2 lower shock/spring mounting bolts. The OEM shock/spring can now be removed from the truck.

Mount Installation

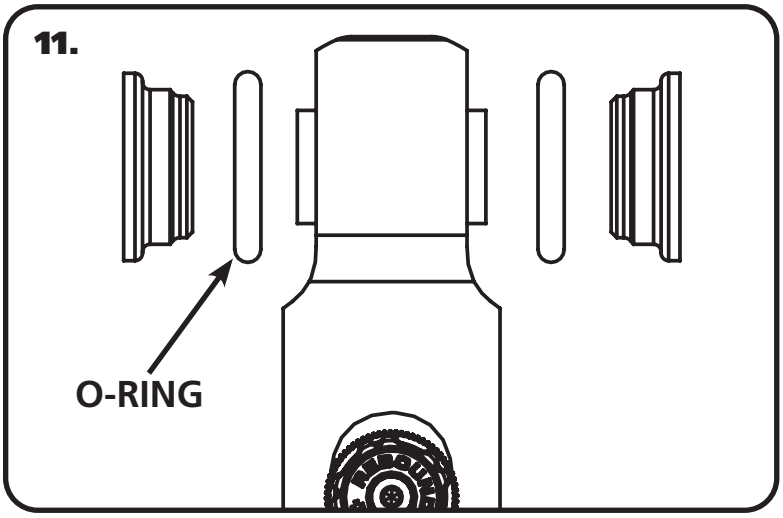
8. Install a M10 flat washer on each of (3) M10 x 50mm hex bolts. Align the mounting holes of the upper mount with the mounting holes in the frame. THE SLOT IN THE UPPER MOUNT, NEEDS TO BE TOWARD THE FRAME. The mounting bolts need to be installed with the threads pointing up. Insert a bolt/washer in each hole. Install a factory nut on the threads of each bolt sticking through the frame. Torque the hardware to 45 ftlbs.



9. THE LOWER MOUNTS ARE SIDE SPECIFIC. **IMAGE 9** SHOWS A TOP VIEW OF BOTH MOUNTS. The shock mount is offset to the front of the truck.

10. Align the lower mount with the OEM shock mounting holes. The mount needs to be positioned with the bent tab to the inside of the truck. The shock mounting tabs need to be offset to the front of the truck. Install a 7/16" flat washer on each of (2) 7/16"-14 x 2 1/4" bolts. Insert the bolt/washers through the mount and control arm. Install a 7/16" flat washer and 7/16"-14 nylok nut on the threads of each bolt. Torque to 70 ft-lbs.

Installation of CoilOver Assembly



11. Slide an O-ring onto each aluminum shock spacer, and then insert the small diameter of the shock spacers over the cylinder on each side of the shock bearing in the eyelet.

12. Insert the shock eyelet into the upper mount. Line up the shock bearing/spacers hole with the mounting holes of the upper mount. Insert a 1/2"-13 x 2 3/4" bolt through the mount/shock. **MAKE SURE THE ADJUSTMENT KNOB IS FACING OUT TO THE WHEEL.**

13. Install a 1/2" flat washer and 1/2"-13 nylok nut on the threads of the bolt that are sticking through the mount.

Installation of CoilOver Assembly

14. Slide an O-ring onto each aluminum shock spacer, and then insert the small diameter of the shock spacers over the cylinder on each side of the shock bearing in the shock body.

Insert the shock body into the lower mount. Line up the shock bearing/spacers hole with the mounting holes of the lower mount. Insert a 1/2"-13 x 2 3/4" bolt through the mount/shock.

15. Install a 1/2" flat washer and 1/2"-13 nylok nut on the threads of the bolt that are sticking through the mount. Torque the upper and lower mounting hardware to 75 ftlbs.

16. Image 16 shows the CoilOver installed. Repeat steps 4-15 on the other side of the truck. Preload the springs of the CoilOver 1/2" to start. You may need to adjust the amount of preload in the spring, but this will be determined after the truck has been sat on the ground. Refer to **Page 9** for spring adjustment.

17. If installing upper control arms, do so now.

Reattach the sway bar linkage.

SETTING PRELOAD

1. Before adding any preload to your coilover, ensure that you are starting with zero preload on the spring. The adjustment nut should be snug against the coil spring, but not compressing it. The locking screw should be installed, but not yet tightened.

2. With zero preload on the spring, measure the distance from the bottom of the adjustment nut to the flat of the shock body. This is your starting point of reference.

3. Using a spanner wrench (Figure 3), apply preload by threading the adjustment nut up the shock an additional 1/2" from the measurement you took in Step 2. This is your initial preload setting.

4. Tighten the locking screw to secure the adjustment nut in its preloaded position. Torque to **18 in-lbs**.

ADJUSTING RIDE HEIGHT

NOTE: Optimal ride quality and handling typically occurs when the shock absorber is sitting between 40-60% of its full travel at ride height. However, measuring the shock can be difficult on some applications. If you do not wish to measure your shocks, an easier method that is still quite effective is to measure wheel travel. See Steps 1-4 below for this alternate method. If you've determined that your shock travel is good, you may skip to Step 5 to jump straight to making any necessary ride-height adjustments.

1. With coilovers installed and the preload set, lower the vehicle to the ground. With the entire weight of the vehicle on the wheels, jounce the suspension and roll the vehicle forward and backward to release any suspension bind.

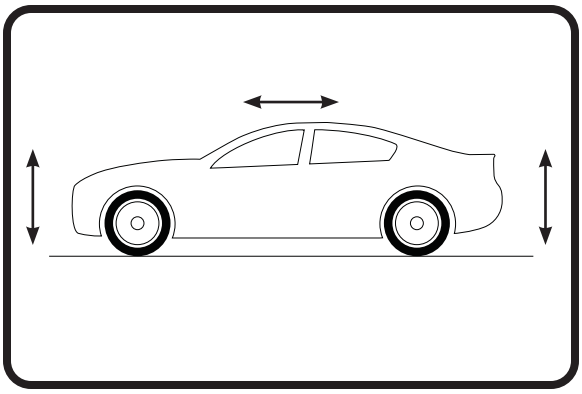


Figure 1

2. At the centerline of the wheel, take a measurement from the fender lip to the ground (Figure 2).

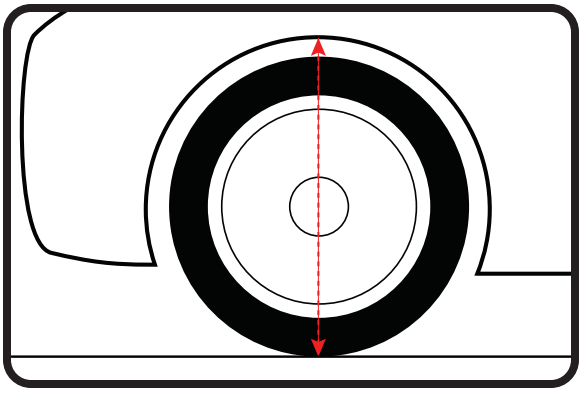


Figure 2

3. Lift the vehicle by the frame until the wheel is barely touching the ground. Take another measurement from the fender lip to the ground (Figure 3).

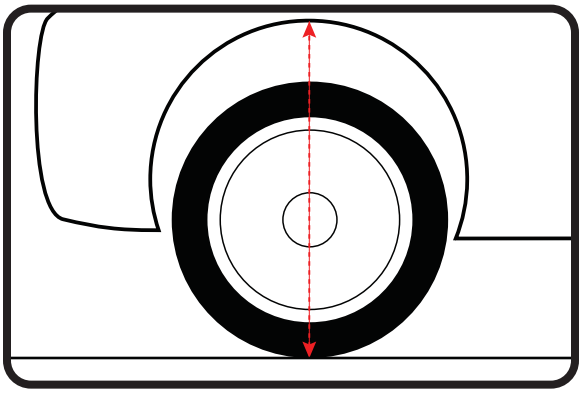


Figure 3

4. The difference between the measurements taken in Steps 2 and 3 is your **extension travel** at the wheel. A minimum of 1.5" of extension travel (at the wheel) is typically needed to prevent the shock from topping out. If you have more than 3" of extension travel, you may be at risk of bottoming out the shock and need to increase the ride height.

ADJUSTING RIDE HEIGHT

5. With coilovers installed and the preload set, lower the vehicle to the ground. With the entire weight of the vehicle on the wheels, jounce the suspension and roll the vehicle forward and backward to release any suspension bind. Evaluate your ride height.

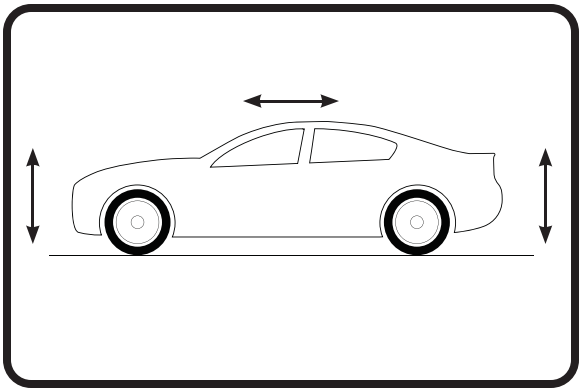


Figure 4

6. If you determine you need to adjust the ride height, raise the vehicle by the frame and allow the suspension to hang freely.

7. Loosen the locking screw on the coilover adjustment nut just enough to be able to turn the nut. **Do not remove the locking screw.** (Figure 5).

Figure 5

8. Measure the distance from the bottom of the adjustment nut to the flat of the shock body. We recommend recording this measurement for reference (Figure 6).

Figure 6

9. Using a spanner wrench, thread the nut up or down the shock body to achieve the desired ride height (Figure 7). Tighten the locking screw to secure the adjustment nut in place. Torque to **18 in-lbs**.

10. Lower the vehicle to the ground, jounce the suspension and roll the vehicle forward and backward to release any suspension bind.

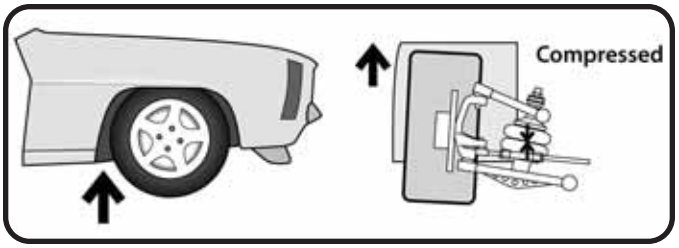
11. Recheck your ride height. If you need to adjust, repeat Steps 6-10.

12. Once your desired ride height has been achieved, refer to the Shock Tuning Guide to dial in your shocks.

Figure 7

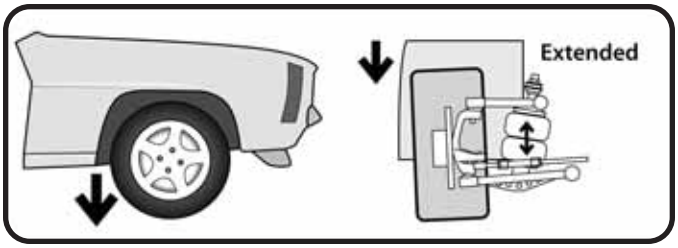
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

The Basics...



COMPRESSION

This typically occurs when you hit a bump in the road. The bump forces the wheel/tire/suspension assembly to "compress" or move upwards into the car.



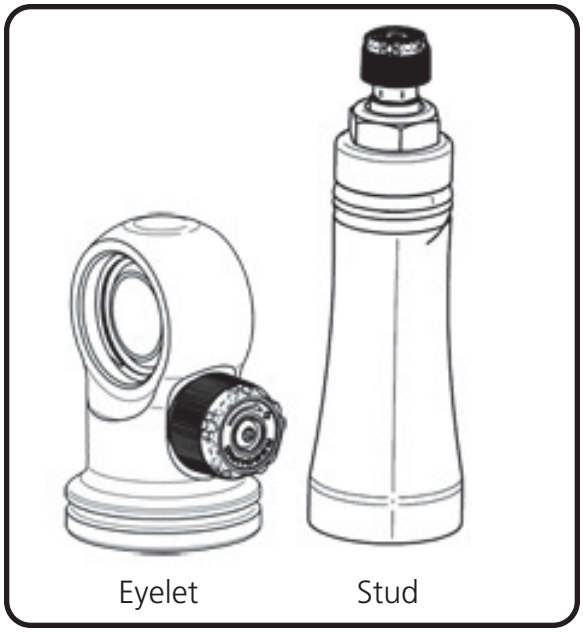
REBOUND

Rebound is the opposite of compression. This occurs when the wheel/tire/suspension assembly falls into a pothole, or simply "rebounds" from being compressed.

Where Are The Knobs?

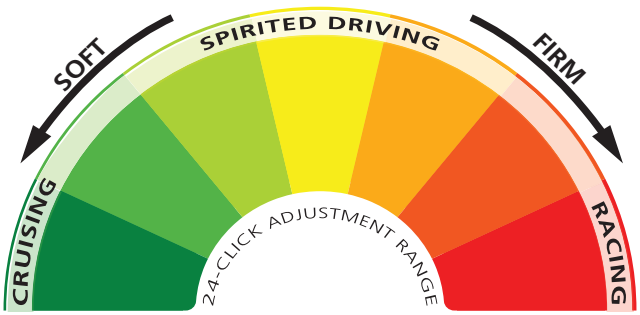
HQ Series Shocks

- **The adjustment knob is located on the top of the shock, either protruding from the side of the eyelet, or atop the stud.**
- **This knob provides rebound adjustment only.**



Knob Function

Counterclockwise = Softer



Clockwise = Firmer

TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

Initial Rebound Setting

NOTE: Before jumping straight to a middle-of-the-road shock setting, we recommend you experience the full range of adjustment potential of your new shocks by first driving your vehicle at both the "full stiff" and "full soft" settings. Understanding how your shocks behave at these extremes will provide recognizable reference points as you attempt to dial in your settings.

1. Begin by setting your shocks to the "full stiff", or minimal rebound position. You do this by turning the adjustment knob clockwise until it stops.

2. Now turn the adjustment knob counterclockwise 12 clicks. This is the approximate center of the adjustment range.

3. Take the vehicle for a test drive. Try to determine if you are experiencing any of the unwanted behaviors found at the extremes of the adjustment range. If you are satisfied with the ride quality and handling, you're all set. Enjoy the ride!

4. If the vehicle feels too "floaty" or soft, turn the knob a few clicks clockwise to increase the damping effect.

If the ride quality is still too harsh or stiff, turn the knob a few more clicks counterclockwise to decrease the damping effect.

5. Take the vehicle for another test drive. If necessary, repeat the steps above until your desired optimal ride quality has been achieved.

General Guidelines

- The rear shocks typically have the most influence on ride quality. This is due to your seating position being closer to the rear than the front.
- Adjustments to the front shocks will generally require 3-4 clicks in any direction to be noticeable, while adjustments to the rear shocks may only require 1-2 clicks to be felt.
- Don't be afraid to turn the knobs and experience the full adjustment range. You are not going to hurt anything and you can always go back if you adjust too far one way or the other.