ridetech

INSTALLATION INSTRUCTIONS

Part # 11806110

Rear HQ Coil-Overs

2021-2026 Tahoe/Suburban

www.ridetech.com
812.482.2932

Please Read And Understand All Instructions And Warnings Prior To The Installation Of This Product.

Congratulations on your new Ridetech product! It's an honor that you've selected the Ridetech brand to upgrade your ride. Our products are developed around quality and performance without compromise. We're confident you'll have many years (and miles) of pure driving enjoyment.
Thank you for choosing Ridetech!

Road Map

TORQUE SUMMARY	
LOCATION	**TORQUE SPEC**
M10 Upper Mount Bolts	45 ft-lbs
1/2" Shock Mounting Bolts	75 ft-lbs

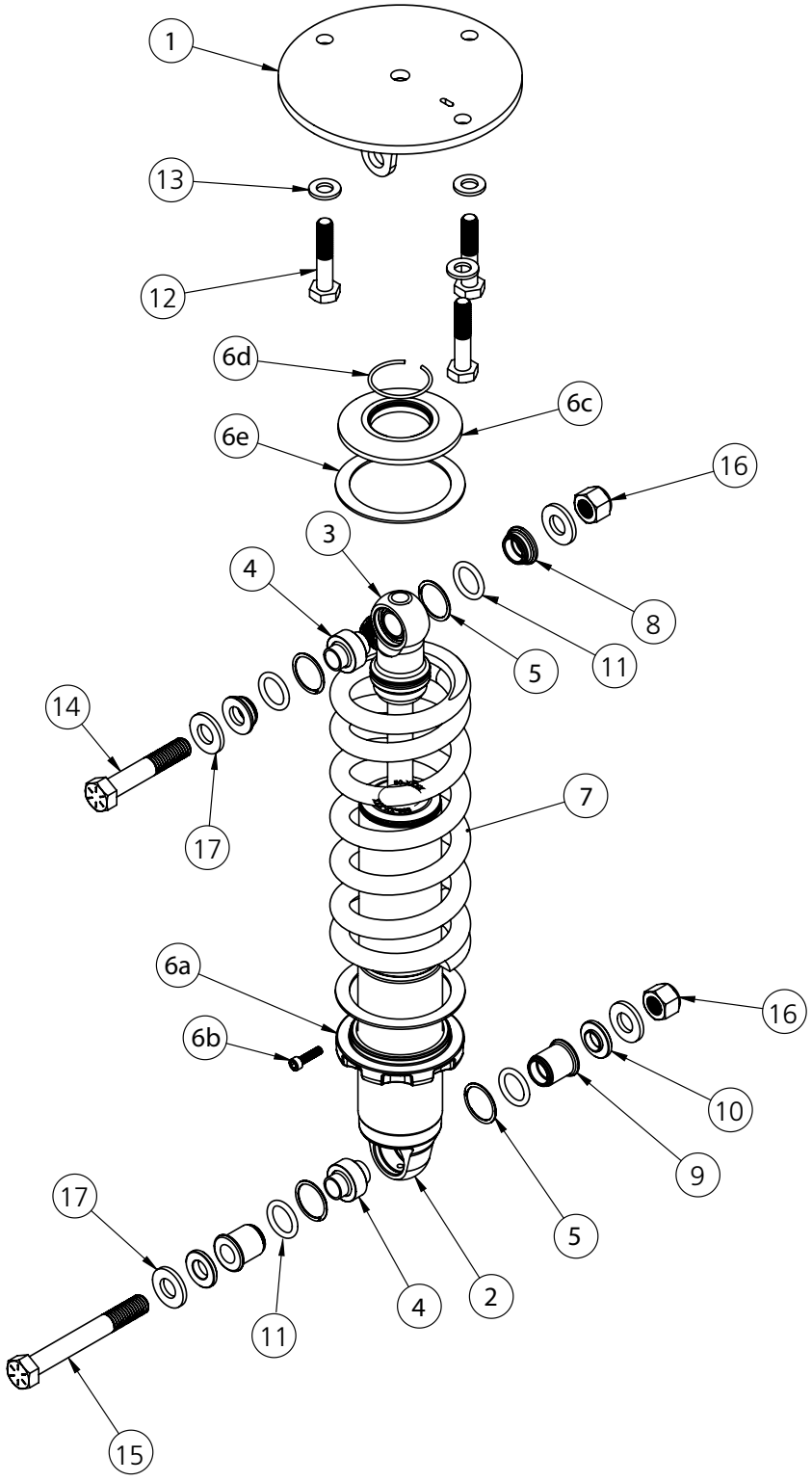
Coil-Over Dimensions	
Measured From Center-To-Center Of Shock Bearings	
Compressed	**12.33"**
Ride Height	**16.00"**
Extended	**18.63"**

EXPLODED VIEWS AND PARTS LISTING

Item #	Part #	Description	Qty
1	90001111	Upper Shock Mount	2
2	982-10-806	6.3" Stroke HQ Series Shock	2
3	815-05-022-Kit	1.7" Shock Eyelet Assembly	2
4	90001628	1/2" ID Bearing (installed in shock eyelet/body)	4
5	90001995	Bearing Snap Ring (installed in shock eyelet/body)	8
6a	803-00-199	Lower Spring Adjuster Nut - 234-15-200	2
6b	803-00-199	Adjuster Nut Locking Screw - 99050001	2
6c	803-00-199	Upper CoilSpring Retaining Plate - 90002070	2
6d	803-00-199	CoilSpring Plate Retaining Ring - 038-01-006-A	2
6e	803-00-199	Delrin Spring Washer - 70010828	4
7	59120600	Coilspring 12" 600lb	2

HARDWARE KIT: 98019007			
Item #	**Part #**	**Description**	**Qty**
Spacers			
8	90003929	Shock Spacer, .50" ID x .365"L	4
9	90001120	Shock Spacer, .50"ID x .967"L	4
10	90001121	T-Bushing	4
11	99007210	O-RIng	8
Upper Mount			
12	99111009	M10-1.5 x 50mm Hex	6
13	99113002	M10 Flat Washer	6
Shock Mounts			
14	99501064	1/2"-13 x 2.75" Hex	2
15	99501037	1/2"-13 x 4.00" Hex	2
16	99502009	1/2"-13 Nylok Nut	4
17	99503014	1/2" SAE Flat Washer	8

EXPLODED VIEWS AND PARTS LISTING



COILOVER ASSEMBLY INSTRUCTIONS

1. Thread the preload adjustment nut onto the shock from the bottom (Figure 1). A few threads of engagement is ok for now.

Figure 1

2. The rebound adjustment knob must be removed prior to installing the upper spring mount in step 4. Turn the adjustment knob clockwise until it stops, then remove the torx screw and the knob (Figure 2).

Figure 2

3. Slide a Delrin washer over the shock and onto the adjustment nut, followed by the coil spring (Figure 3).

Figure 3

4. With the adjustment knob removed, slide a Delrin washer over the eyelet and place on top of the coil spring, followed by the upper spring mount (Figure 4).

Figure 4

COILOVER ASSEMBLY INSTRUCTIONS

5. Slide the retainer clip over the upper eyelet and into the groove at the base of the eyelet. Make sure it snaps into place and is fully seated in the groove (Figure 5).

Figure 5

6. Reinstall the adjustment knob (Figure 6).

Once you have reinstalled the knob, you may want to turn the knob about 12 clicks counterclockwise since the rebound is currently set at "full stiff".

Figure 6

7. Thread the adjustment nut up the shock body to remove the slack and secure the spring and upper mount against the eyelet. Install the locking screw in the adjustment nut, but do not tighten yet (Figure 7).
This screw will be tightened after your preload has been set.

Figure 7

8. Your assembled coilover is ready to be installed on the vehicle.

Figure 8

Disassembly

NOTE: The sway bar end link must be disconnected in order to provide enough suspension droop to allow removal of the existing coil-over.

1. Disconnect the upper bolt & nut of the sway bar end link as shown in figures 1 & 2.

2. Remove the 8 screws that secure the rear half of the fender liner (Figure 3).

3. Peel back the liner to gain access to the upper coil-over mount (Figure 4).

Figure 1

Figure 2

Figure 4

Figure 3

Disassembly

4. If your vehicle is equipped with electronic shocks, remove the plastic retaining clip from the coil-over mounting stud (Figure 5).

A pry bar or long flathead screwdriver works well for this.

If you do not have electronic shocks, you may skip to step 6.

Figure 5

5. Press the orange tab on the electrical connector to disconnect the shock wire as shown in Figure 6.

Figure 6

6. Using an 18mm wrench, remove the three nuts on the coil-over upper mounting studs (Figure 7).

Figure 7

Disassembly

7. Remove the coil-over lower mounting bolt (Figure 8).

Figure 8

8. Remove the outer mounting bolt from the existing upper control arm and disengage the arm from the spindle (Figure 9).

Figure 9

9. Allow the axle to droop and remove the existing coil-over (Figure 10).

NOTE: This is a good time to install your Ridetech rear upper control arms. Refer to the instructions included with the rear upper control arm kit (11806699).

Figure 10

Coil-Over Installation

10. Position the upper shock mount in the coil-over pocket and align the 3 holes in the plate with the original mounting holes (Figure 11).

Figure 11

11. Insert an M10 bolt with washer through each of the 3 mounting holes and secure using the original coil-over nuts (Figure 12).

Figure 12

12. Torque all of the M10 upper shock mount bolts to **45 ft-lbs**.

Figure 13

Coil-Over Installation

13. The existing shock wiring will no longer be used, but you may reattach the clip to one of the upper shock mount bolts to keep things tidy and secure (Figure 14).

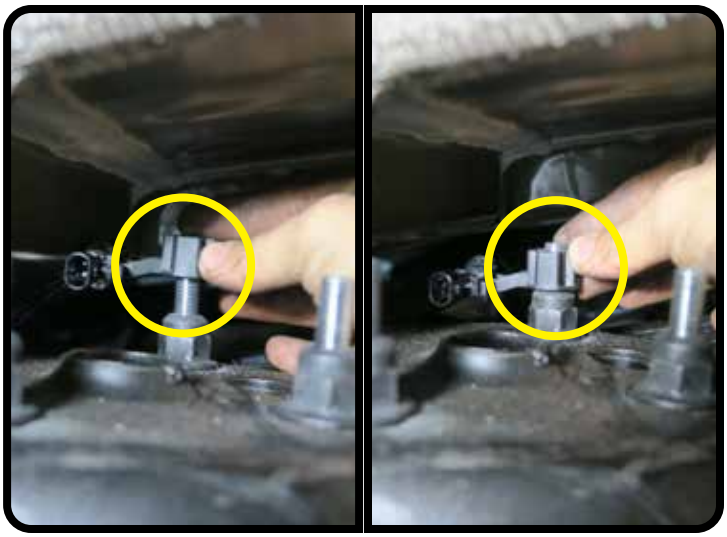


Figure 14

14. You may reinstall the fender liner prior to installing the new coil-over (Figure 15).

Figure 15

NOTE: If you have not yet assembled your coil-over shocks, assemble them now. Refer to the guide on pages 5-6.

15. Slide an O-ring onto each side of the bearing in the shock body (Figure 16).

Figure 16

Coil-Over Installation

16. Snap a 90001120 shock spacer onto each side of the bearing in the shock body as shown in Figure 17.

Figure 17

17. Slide a 1/2" flat washer onto a 1/2" x 4" bolt, followed by a 90001121 T-bushing.

Figure 18

18. Position the coil-over in the lower control arm, align the mounting hole with the shock bearing and spacers, and insert the bolt with T-bushing and washer (Figure 19).

Figure 19

Coil-Over Installation

19. Install a T-bushing and flat washer on the threaded end of the bolt and secure with a 1/2" nylok nut (Figure 20).

Torque to **75 ft-lbs**.

Figure 20

20. Slide an O-ring onto each side of the bearing in the shock eyelet (Figure 21).

Figure 21

21. Snap a 90003929 shock spacer onto each side of the bearing in the shock eyelet as shown in Figure 22.

Figure 22

Coil-Over Installation

22. Position the coil-over in the upper mount, align the mounting holes with the shock bearing and spacers, and insert a 1/2" x 2.75" bolt with flat washer (Figure 23).

NOTE: Be sure to position the adjustment knob so it is facing outboard.

Figure 23

23. Install a flat washer on the threaded end of the bolt and secure with a 1/2" nylok nut (Figure 24).

Torque to **75 ft-lbs**.

Figure 24

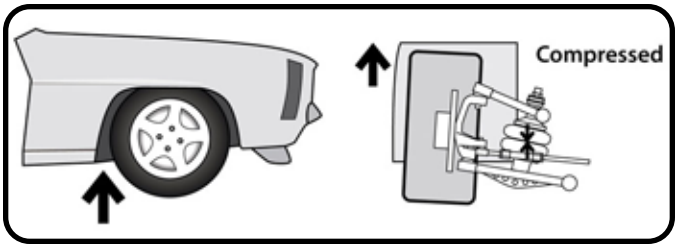
24. Reattach the sway bar end link.

25. Repeat steps 1-24 on the opposite side.

Figure 25

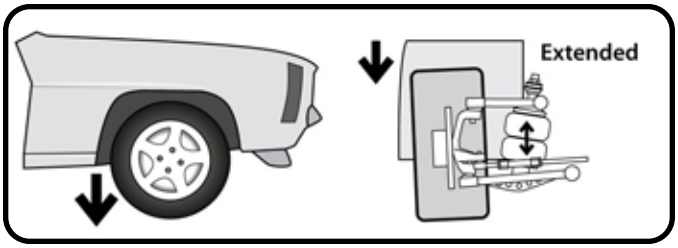
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



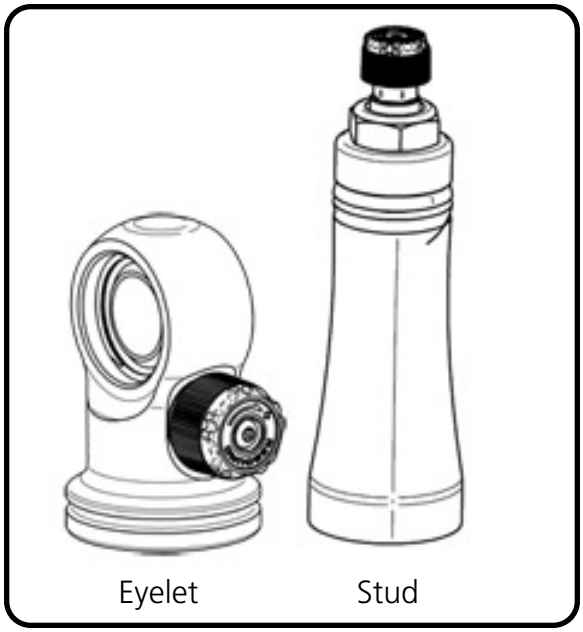
REBOUND

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?

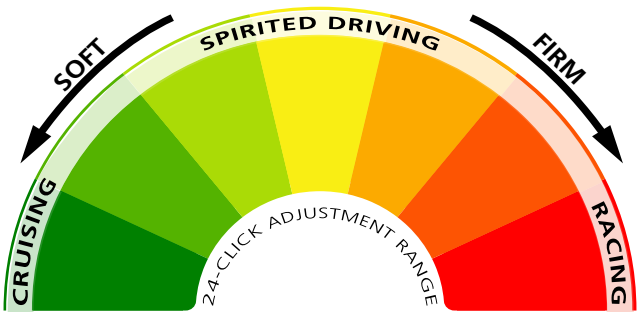
HQ Series Shocks

- **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.