



ridetech



INSTALLATION INSTRUCTIONS



Part # 11414010

Rear CoolRide Air Spring and Shock Kit

2000-2006 Tahoe / Yukon / Suburban 2WD

2000-2006 Tahoe / Yukon / Suburban 4WD



www.ridetech.com
812.482.2932





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



THANK YOU

Congratulations on your new Ridetech product! It's an honor that you've selected the Ridtech 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

| | |
|------------------------------------------|--------------|
| Safety and Pre-Installation Notes | 3 |
| Recommended Tools | 4 |
| What's In The Box? | 5 |
| Disassembly | 6-7 |
| Air Spring Installation | 8-9 |
| Bump Stop Modification | 10 |
| Sway Bar Link Modification | 10 |
| Shock Installation | 11 |
| Exploded View/Parts Listing | 12 |
| Shock Tuning Guide | 13-14 |



SAFETY FIRST



Always use jack stands (if not using a lift). Never rely solely on a hydraulic jack to support the vehicle.

Always raise the vehicle on a clean and level surface. Use wheel chocks when necessary.

Be sure to wear proper Personal Protective Equipment (PPE) when welding.

Always wear eye protection (Z87.1) when operating power tools.

PRE-INSTALLATION NOTES

If you live in a rust-prone region, you may want to apply some penetrating oil to the rear shock bolts and rear sway bar linkage bolts a day or two prior to beginning this installation.

This kit requires cutting and welding of the rear sway bar links. If you are uncomfortable with this type of operation, you may want to find someone with welding experience to assist.

Ridetech recommends this system be installed by a professional technician or experienced, reputable mechanic. Modification or improper installation of this product may result in loss of warranty. Proper installation and setup of your suspension is critical to the safe and enjoyable operation of your vehicle. Failure to follow the guidelines and specifications provided in these instructions may result in damage to your vehicle and/or death or serious injury to you, your passengers, or other motorists. Ridetech will not be held liable for any damage, loss or injury occurring from the use of this product outside of its intended application and design parameters.



RECOMMENDED TOOLS



Jack Stands

Thread Sealant

Floor Jack

Tape Measure

Prybar/Crowbar

Cutting Tool

Torque Wrench

Welder

SAE Socket/Wrench Set

Metric Socket/Wrench Set



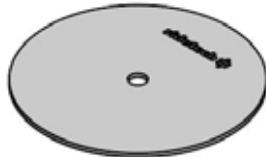
WHAT'S IN THE BOX?



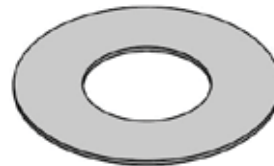
HQ Series Shock
Qty: 2



Air Spring
Qty: 2



Upper Mounting Plate
Qty: 2



Lower Bag Roll Plate
Qty: 2



3/8-16 x 1" Bolt
Qty: 2



3/8 Lock Washer
Qty: 2



3/8 Flat Washer
Qty: 2

***See exploded view on page 13 for a detailed parts listing.**

**Images Not To Scale

Disassembly

1. Raise the vehicle to a safe and comfortable working height, supported by the frame.

NOTE: You will need to place a jack under the rear axle to be able to raise and lower the axle during the install.

2. Raise the rear axle slightly to remove the tension from the rear shocks (Figure 1).

3. Remove the upper & lower shock bolts and remove the rear shocks.

NOTE: Retain the existing shock hardware. It will be used in step 19 when installing your Ridetech HQ Series shocks.

4. Remove the rear sway bar linkage from both sides (Figure 3). Retain the hardware.

NOTE: The sway bar links will be modified in step 15 prior to reinstallation.



Figure 1



Figure 2



Figure 3

Disassembly (CONT.)

5. Lower the axle jack so the coil springs are fully relaxed.

6. Remove the rear coil springs. A prybar or crowbar works well.

NOTE: Be sure to also remove the spring isolators (See Figure 5).

The bare spring perch should look similar to Figure 6.



Figure 4



Figure 5



Figure 6

Air Spring Installation

7. Install the roll plate on the bare coil spring perch (Figure 7). The roll plate is the larger plate with the 3.25" diameter hole in the center.



Figure 7

8. Install a 3/8" split lock washer and 3/8" flat washer on a 3/8"-16 x 1" bolt. Insert the bolt into the center hole of the top plate (Figure 8).



Figure 8

9. Place the top plate w/bolt on top of the frame rail at the OEM coil spring location (Figure 9).



Figure 9

Air Spring Installation

10. Apply thread sealant to an air fitting and install the fitting in the side of the air spring cap.



Figure 10

11. Position the air spring at the original coil spring location. Thread the bolt coming through the top plate into the threaded bung in the center of the air spring top cap.



Figure 11

***Do Not Tighten The Bolt Yet.**

12. Rotate the air spring to position the air fitting for optimal air line routing. Once you are satisfied with the location of the air fitting, torque the 3/8" top bolt to **15-20 ft-lbs.**



Figure 12

13. Repeat steps 7-12 on the opposite side.

Bump Stop & Sway Bar Link Modifications



14. Shorten the bump stops by cutting off the bottom ring/segment of each bump stop.



Figure 13

15. Each of the OEM sway bar links will need to be shortened by 1".

NOTE: In order to maintain the orientation of the ends of the linkage once the 1" segment has been removed, we recommend scribing a line lengthwise to aid in realigning the two ends when welding back together (Figure 14).

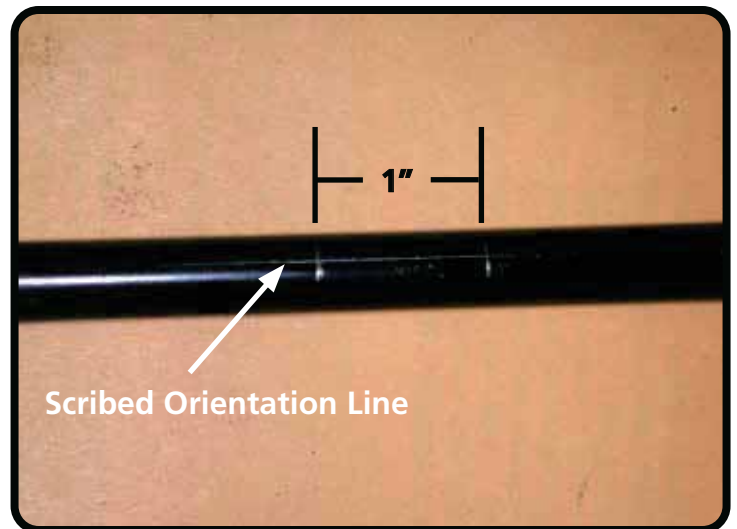


Figure 14

16. Remove a 1" segment from the center of the linkage (Figure 15, top).



Figure 15

17. Align your scribe line and weld the two halves back together (Figure 15, bottom).

18. Reinstall both of the modified sway bar links using the OEM hardware.

Shock Installation

19. Using the OEM shock hardware, install your new Ridetech HQ Series shocks.

NOTE: The shocks may be installed with the adjustment knob at either the upper or lower shock mount. This is a matter of personal preference and is typically dictated by whichever position offers the easiest access to the adjustment knob.

20. Torque the upper and lower shock bolts to **85 ft-lbs.**

NOTE: When lowering the vehicle, lower slowly and ensure that the air spring properly aligns with and sits centered on the roll plate (Figure 18).



Figure 16



Figure 17

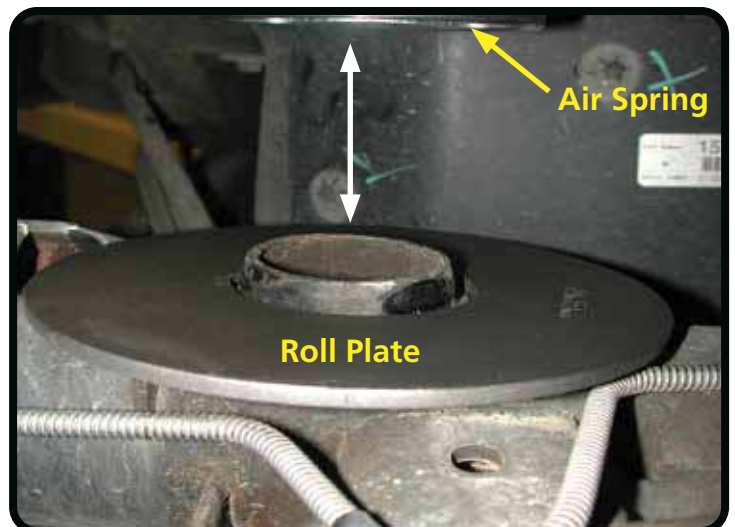
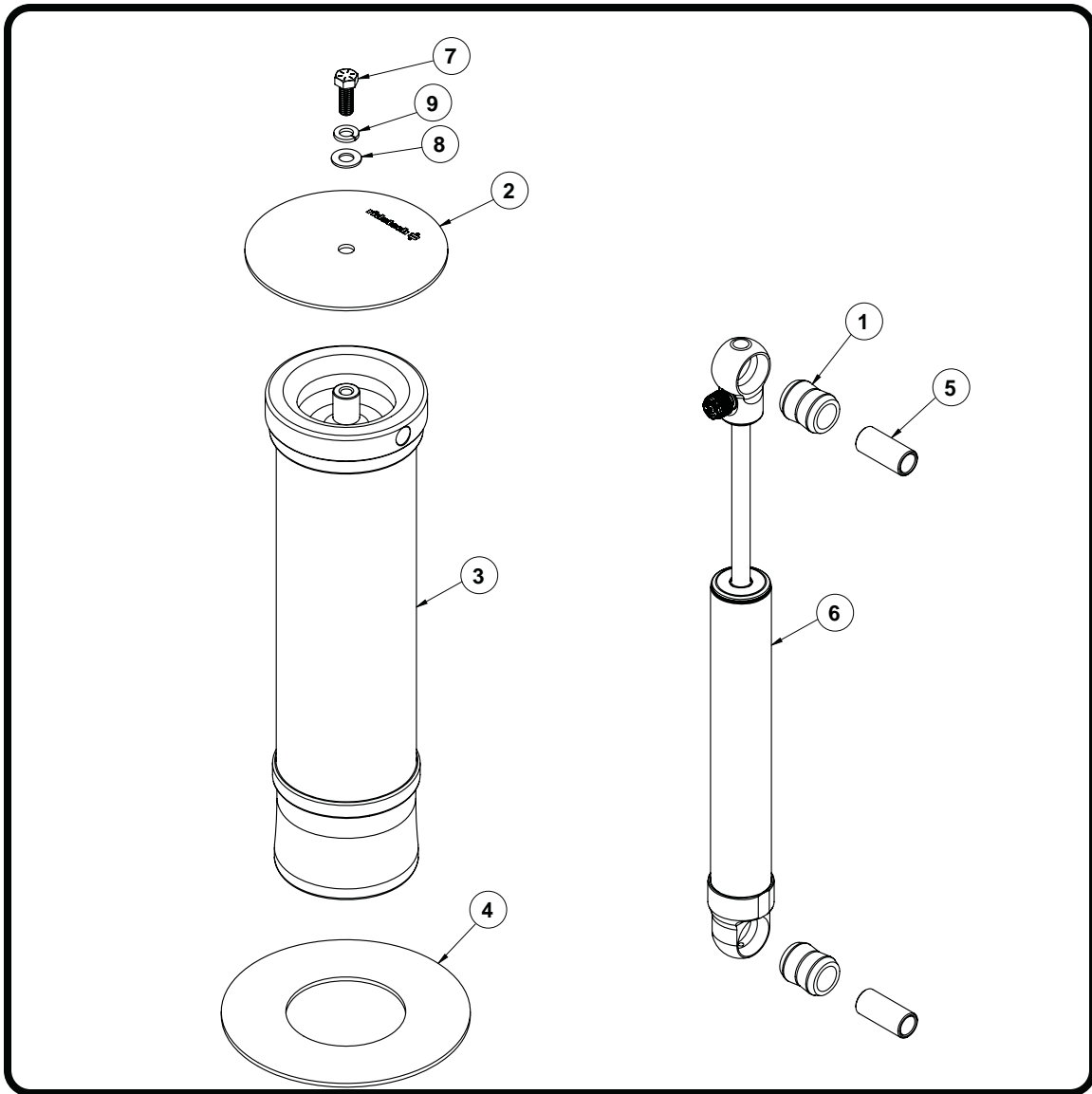
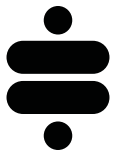


Figure 18

EXPLODED VIEWS AND PARTS LISTING

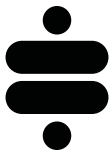


| Item # | Part # | Description | Qty |
|--------|------------|-----------------------------------|-----|
| 1 | 70011138 | Poly Bushing | 4 |
| 2 | 90000070 | Upper Mounting Plate | 2 |
| 3 | 90002018 | 91mm Straight Sleeve Airspring | 2 |
| 4 | 90003328 | Lower Bag Roll Plate | 2 |
| 5 | 90003474 | Sleeve; .558 ID x .75 OD x 1.6 | 4 |
| 6 | 986-10-020 | 7.55" HQ Series Shock, Eyelet Top | 2 |
| 7 | 99371025 | 3/8-16 X 1 Hex Bolt | 2 |
| 8 | 99373002 | 3/8 SAE Flat Washer | 2 |
| 9 | 99373006 | 3/8 Split Lockwasher | 2 |

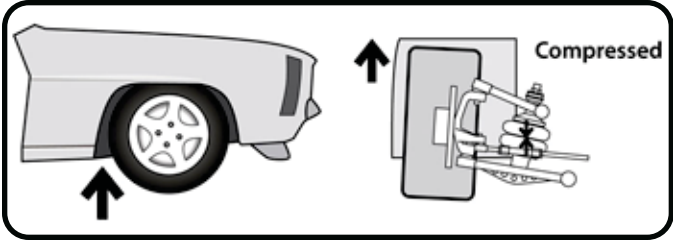


TUNING GUIDE

SINGLE-ADJUSTABLE SHOCKS

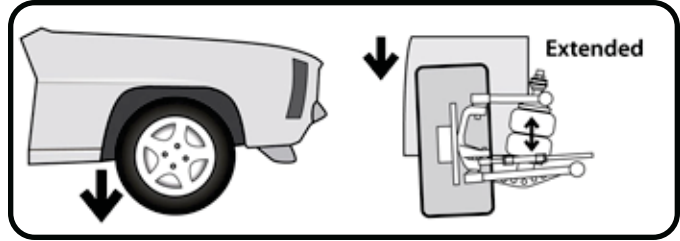


The Basics...



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.



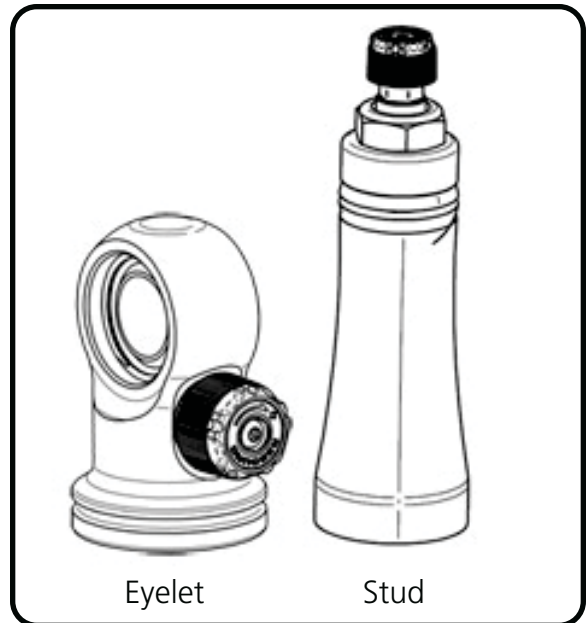
REBOUND

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

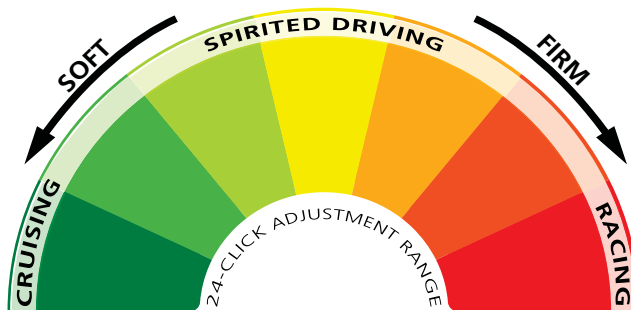
- The adjustment knob is located on the top of the shock, either protruding from the side of the eyelet, or atop the stud.
- This knob provides rebound adjustment only.



Knob Function

Counterclockwise

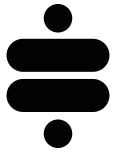
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Softer



Clockwise

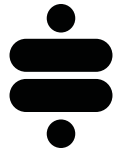
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Firmer





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 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.