ridetech

INSTALLATION INSTRUCTIONS

Part # 12075401

Rear HQ Shockwaves

1964-1969 Lincoln

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

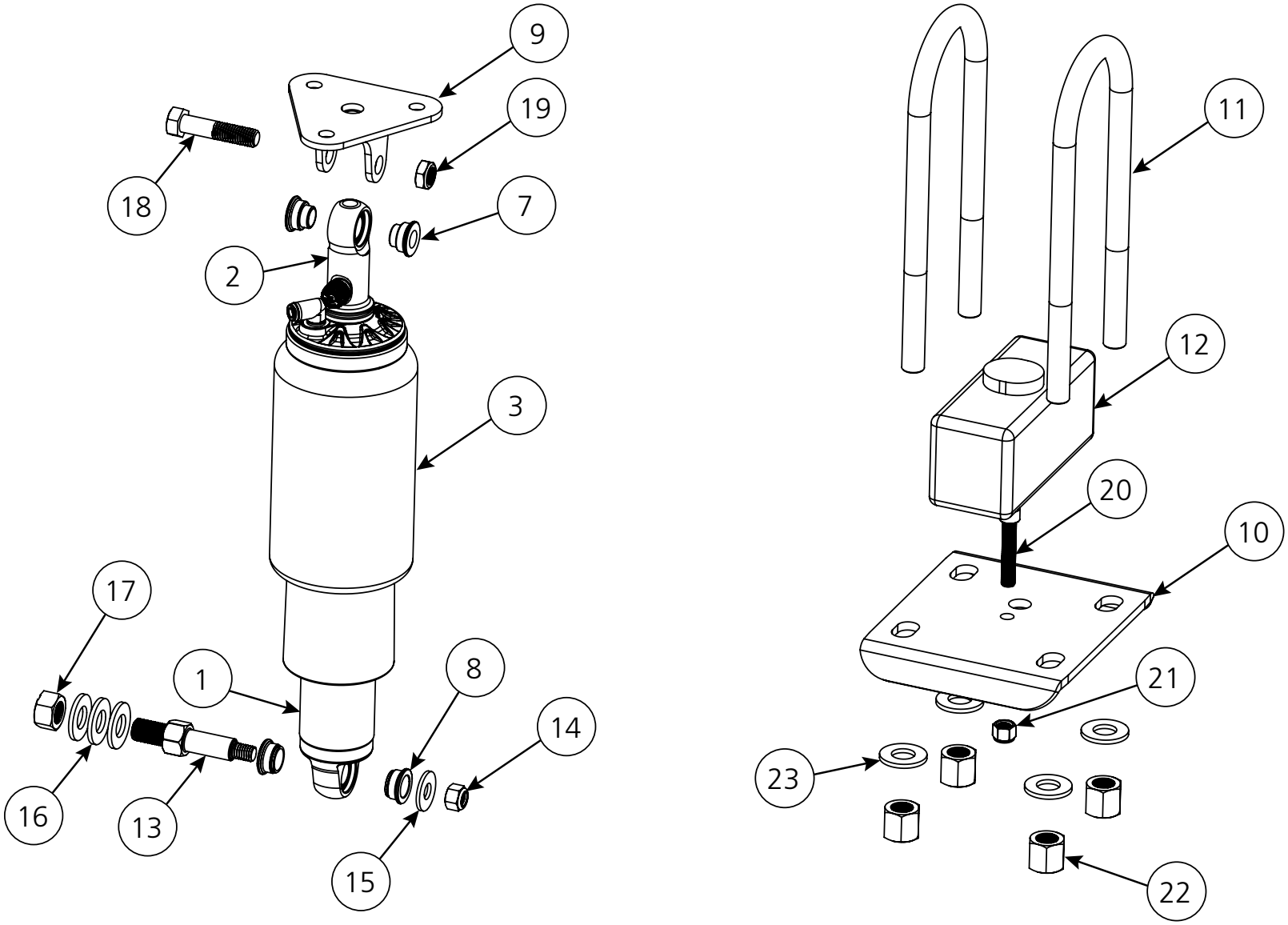
Shockwave Dimensions		
Measured From Center-To-Center of Shock Bearings		
Compressed	**Ride Height**	**Extended**
15.00"	17.75"	20.60"

EXPLODED VIEWS AND PARTS LISTING

Item #	Part #	Description	QTY
1	982-10-806	6.3" Stroke HQ Series Shock	2
2	90002025	2.7" Shock Eyelet	2
3	24090799	7000 Series, 4" Diameter AirSpring	2
4	70009554	Poly Bushing (installed in shock body)	4
5	90001994	5/8" ID Bearing (installed in shock and eyelet)	4
6	90001995	Bearing Snap Ring (installed in shock and eyelet)	8
7	90002043	.500" ID spacer for TOP bearing	4
8	90002067	.625" ID spacer for BOTTOM bearing	4
9	90000700	Upper Mounting Plate	2
10	90000701	Lower U-Bolt Plate	2
11	99626002	5/8" x 9 1/2" U-Bolts	4
12	90000702	Lowering Block	2
13	70002825	Lower Shock Stud	2
14	99432002	7/16-20 NYLON INSERT L/N	2
15	99433002	7/16 SAE FLAT WASHER	2
16	99623004	5/8 SAE FLAT WASHER	6
17	99622003	5/8-18 TOP LOCKNUT	2

Hardware			
Item #	**Part #**	**Description**	**QTY**
18	99501010	½" x 2 ¼" SAE Gr 8 bolt	2
19	99502003	½" SAE Nylok nut	2
20	99371020	3/8" x 2" SAE Allen bolt	2
21	99372005	3/8" SAE Nylok nut	2
22	99622001	5/8"-18 Hex Nut	8
23	99623001	5/8" Flat Washer	8

EXPLODED VIEWS



Spring Removal

1. Raise the vehicle to a safe and comfortable working height and allow the suspension to hang freely.

2. Remove the factory shocks and upper mounts.

3. Remove the U-bolts that clamp the axle to the leaf spring pack, and then raise the axle out of the way with a floor jack and secure with jack stands (Figure 1).

4. Use a couple of C-clamps to secure the **top 4** springs of the leaf spring pack at each end (Figure 2).

5. Remove the bolt in the center of the pack, along with the straps at either end of the spring pack (Figure 3).

6. Once the bolt and straps are removed, you should be able to remove the two lower leafs as shown in Figure 4.

Figure 1

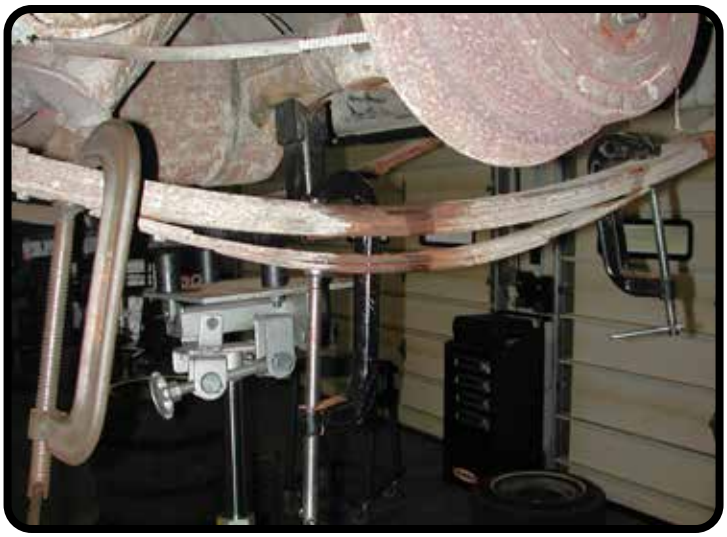


Figure 2

Figure 4

Figure 3

Spacer Block Installation

7. Secure the pack with a 3/8" x 2" Allen bolt and Nylok nut (Figure 5). The bolt needs to be inserted from the top of the pack. Reinstall the straps and then remove the C-clamps.

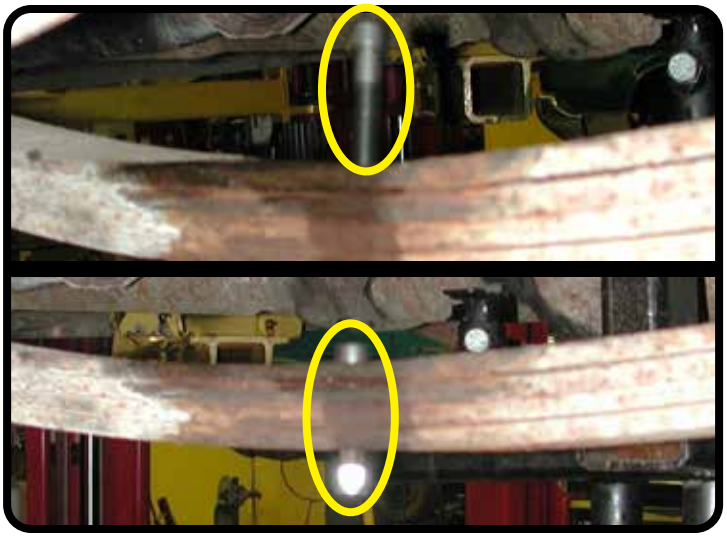


Figure 5

8. Place the Aluminum lowering block on top of the leaf springs. The Allen head will locate the block. Lower the axle down on top of the block. The step on top of the block will slide into the hole in the bottom of the leaf spring pad on the axle. See Figure 6.

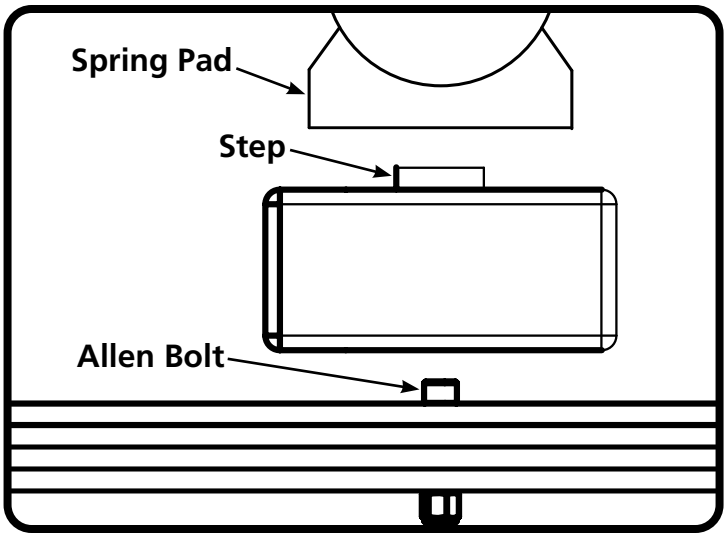


Figure 6

9. Hang the U-bolts over the axle. Position the U-bolt plate under the leaf springs so that the smaller hole in the plate aligns with the Allen bolt and nut (Figure 7). Secure the assembly with the four 5/8" nuts and lock washers supplied.

NOTE: The plate and lowering block will offset the axle to the rear of the vehicle. This will keep the driveshaft from bottoming out and center the tire in the wheel well.

Figure 7

Shockwave Installation

10. Insert a 90002043 ½" ID spacer into each side of the shock bearing. The small OD will go into the bearing (Figure 8). Bolt the Shockwave eyelet to the stud adapter using the ½" x 2 ¼" bolt and Nylok nut.

9. Bolt the upper mounting plate to the factory shock mount holes using the factory bolts. The ShockWave must be bolted to the car with the upper mounting bolt running front to rear (Figure 9).

NOTE: You may need to reposition the air fitting for clearance. This can be done by holding the bottom of the Shockwave and twisting the bellow.

10. Drill the factory shock stud hole out to 5/8". This can be done using a Unibit. Install the Shock stud (90001617) into the factory lower mount using the hardware supplied with the stud. Install a 90002067 5/8" I.D. spacer on the shock stud, then slide the ShockWave onto the stud, followed by another 5/8" I.D. spacer. Secure with a 7/16" washer and Nylok nut (Figure 10).

NOTE: It may be necessary to raise or lower the rear differential with a jack to get the lower shock bearing to line up with the stud.

11. Check the air spring clearance through its full range of travel to ensure it does not make contact with anything.

12. Repeat on the opposite side.

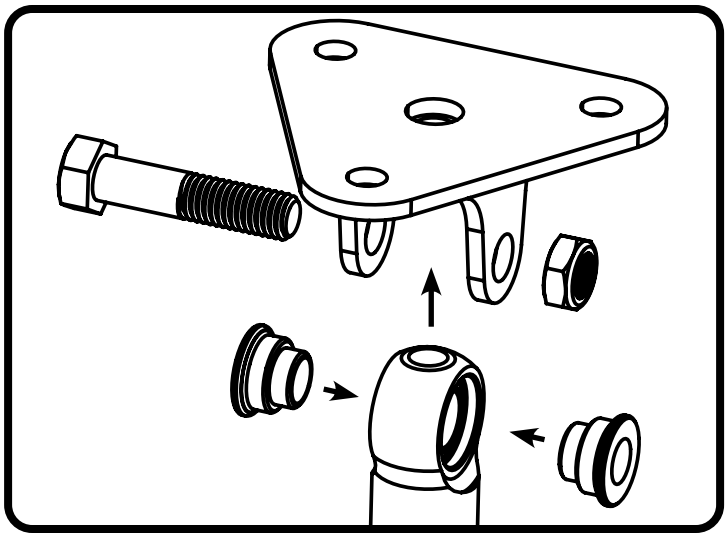


Figure 8

Figure 9

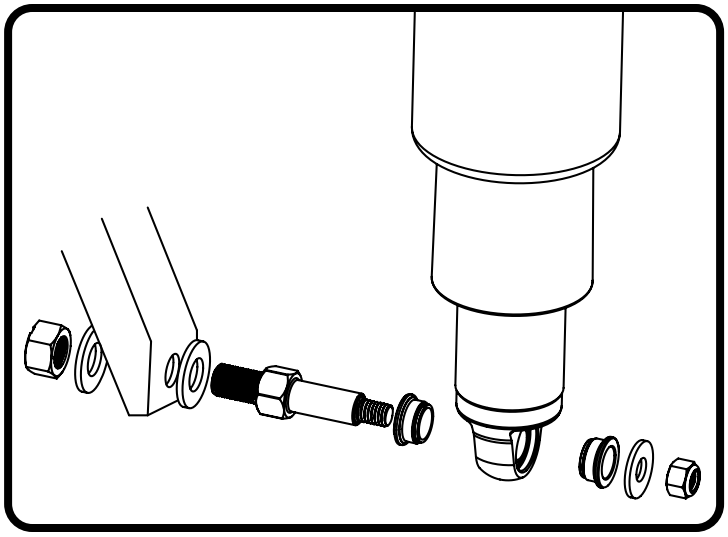


Figure 10

SHOCK*WAVE* CARE GUIDE

PLEASE READ

The air spring locking ring <u>IS NOT</u> adjustable. This ring is set to a specific position at the factory to optimize the air spring stroke with the shock stroke. Attempting to adjust this ring will void your warranty.

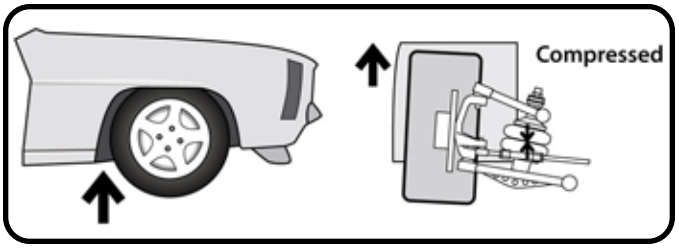
DO NOT attempt to remove the press-in air fitting. It may result in damage to the composite cap and void your warranty.

DO NOT drive the vehicle with the air springs fully deflated. Severe damage to the internal bump stop, shock bushings, and shock mounts may occur.

- **Avoid driving the vehicle with the air springs overinflated or "topped out". Over time the shock valving may suffer severe damage or total failure. Our recommended ride-height range is between 40-60% of total suspension travel.**
- **Do not allow the air spring bellows to rub on or interfere with any surrounding objects. Ensure the ShockWaves are adequately distanced from the exhaust system. Damage or total failure may occur.**
- **Do not use harsh or abrasive chemicals or solvents to clean your ShockWaves. A mild soap and water solution is sufficient.**
- **When working around or near your shocks, avoid allowing over spray of harsh chemicals or solvents to make contact with your ShockWaves.**
- **When attempting to clock the air fitting, you may rotate the air spring assembly on the shock. Ensure the fitting does not contact the vehicle frame or other surrounding objects.**

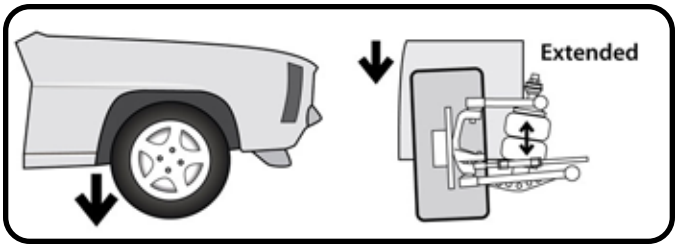
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



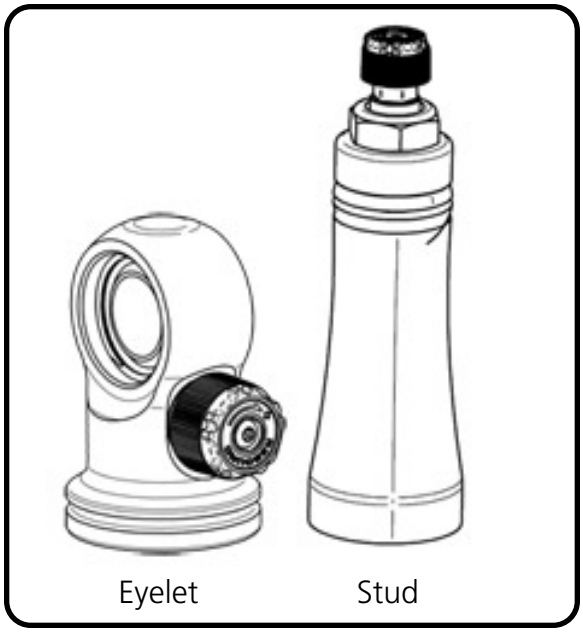
REBOUND

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?

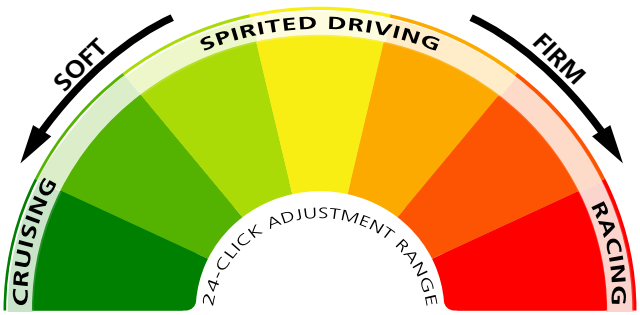
HQ Series Shocks

- **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.