ridetech

INSTALLATION INSTRUCTIONS

Part # 11225401

HQ Series Rear ShockWave

64-72 A-Body

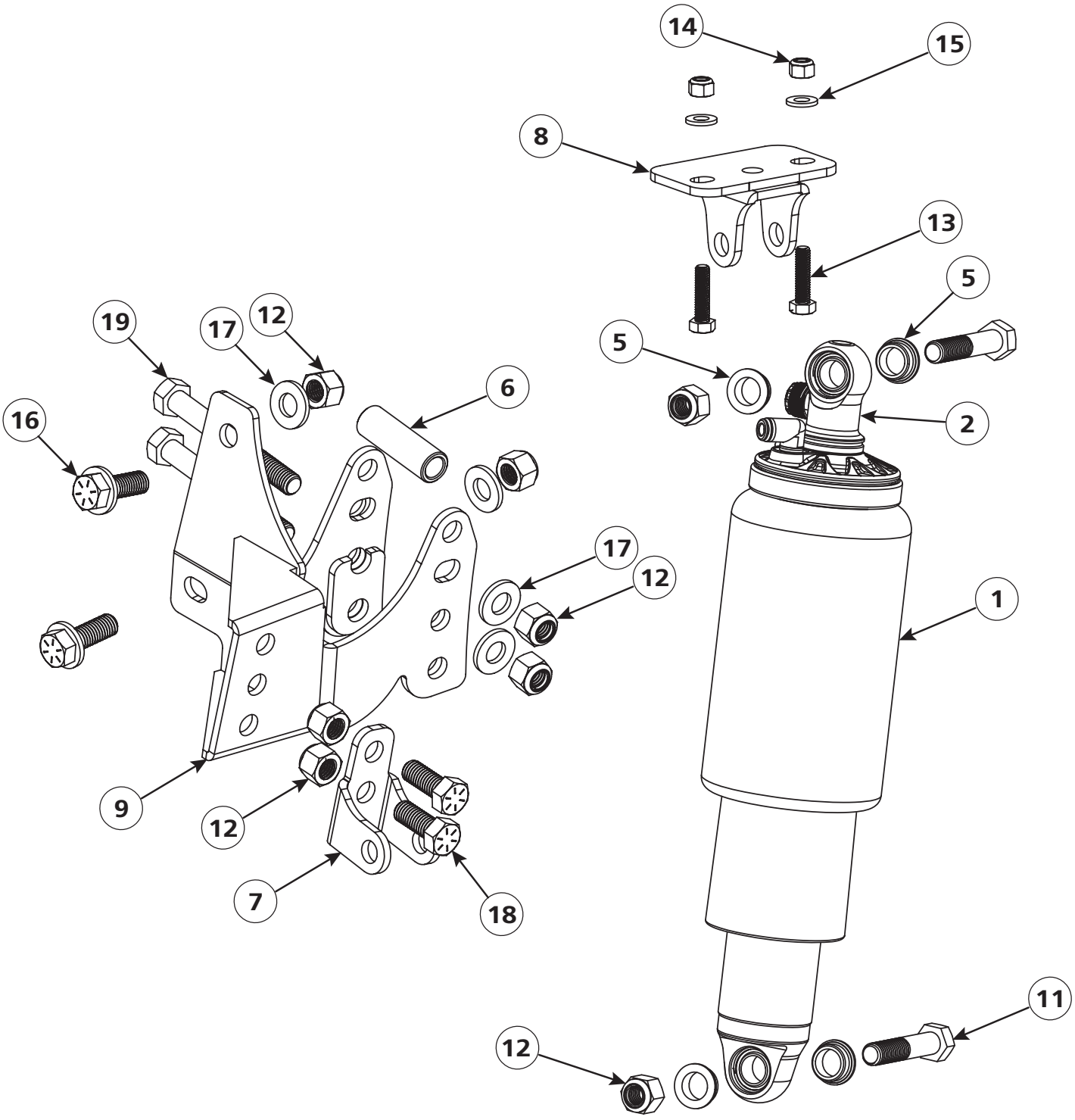
www.ridetech.com
812.482.2932

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

EXPLODED VIEWS AND PARTS LISTING



EXPLODED VIEWS AND PARTS LISTING

Item	Part #	Description	QTY
1	21150799	5.2" STROKE HQ SHOCKWAVE	2
2	815-05-022-KIT	1.7" SHOCK EYELET	2
3	90001994	5/8" ID BEARING (INSTALLED IN SHOCK)	4
4	90001995	BEARING SNAP RING (INSTALLED IN SHOCK)	8
5	90002043	SHOCK SPACER	8
6	90000516	SLEEVE	2
7	90001370	UNIVERSAL DROPPED SHOCK BRACKET	2
8	90002327	UPPER MOUNT	2
9	90002110	AXLE MOUNT DRIVER	1
10	90002111	AXLE MOUNT PASSENGER (NOT SHOWN)	1

99010272			
Item	**Part #**	**Description**	**Qty**
SHOCK TO MOUNTS			
11	99501050	1/2-13 X 2.50 Hex Head Cap Screw	4
12	99502009	1/2-13 Nylok Nut	4
UPPER MOUNT TO FRAME			
13	99311011	5/16-18 X 1.25 Hex Head Cap Screw	4
14	99312002	5/16-18 Nylok Nut	4
15	99313001	5/16" Flat Washer	8
LOWER MOUNTS TO AXLE			
16	99501053	1/2-13 X 1.50 Hex Head Cap Screw Gr8	4
12	99502009	1/2-13 Nylok Nut	4
17	99503014	1/2" Flat Washer	8
SHOCK BRACKET TO AXLE MOUNT			
18	99501062	1/2-13 X 1.25" Hex Head Cap Screw	4
12	99502009	1/2-13 Nylok Nut	4
LOWER BAR			
19	99501063	1/2-13 X 4.25 Hex Head Cap Screw	4
12	99502009	1/2-13 Nylok Nut	4
17	99503014	1/2" Flat Washer	8

Axle Bracket Installation

1. Raise the vehicle to a safe and comfortable working height.

2. Remove the existing rear shocks and springs. Refer to the factory service manual for proper disassembly and removal instructions.

3. Remove the lower trailing arm bolt on one side of the car and allow the trailing arm to drop out of the OEM bracket. Only do one side at a time to prevent the axle from rotating.

4. Position the new axle bracket onto the OEM bracket and align the 2nd hole from the top on the new bracket with the mounting hole in the OEM bracket (Figure 1).

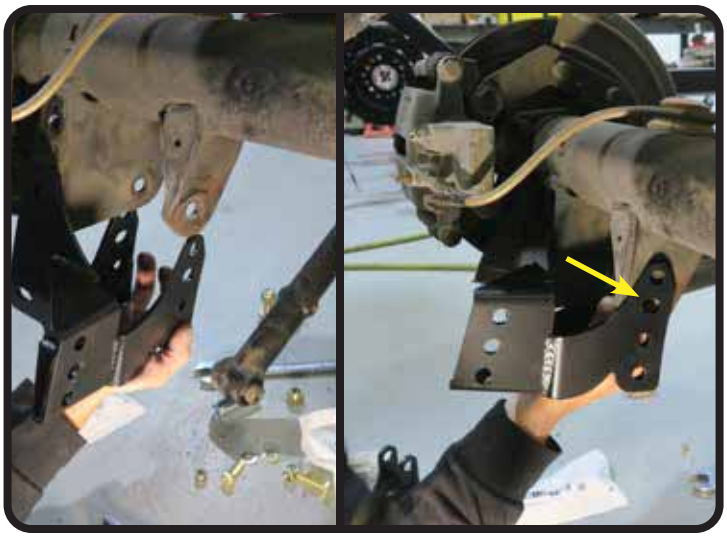


Figure 1

5. If you will be reinstalling the lower trailing arm in the original factory location, align it with the 2nd hole from the top in the axle bracket, and install a 1/2" x 4.25" bolt and washer through the bracket and trailing arm (Figure 2). Install a 1/2" washer and nylok nut on the threaded end of the bolt and snug but do not tighten at this time.

For other mounting location options, see the notes and illustrations on the next page.

Figure 2

Trailing Arm Mounting Options

The axle bracket has four mounting location options for the lower trailing arm. See the notes and illustrations below for each mounting option.

Original Factory Location: No sleeve or drilling is required.

Option 1: No sleeve required. 1/2" hole must be drilled.

Options 2 & 3: If you mount the arm in either of the bottom two holes, the sleeve must be added in one of the top two holes to maintain structural integrity. See Option 2 or 3 below for the respective mounting locations. There must be one open hole between the arm and the sleeve in order to avoid interference between the two. For Option 2, a 1/2" hole must be drilled for the sleeve.

Factory Location

Option 1

Option 2

Option 3

Axle Bracket Installation

6. The lower bolt hole in the back of the axle bracket will align with the factory shock stud hole. Install a 1/2" x 1.5" bolt and washer, followed by a 1/2" washer and nylok nut on the threaded end of the bolt. Snug the hardware but do not tighten at this time.

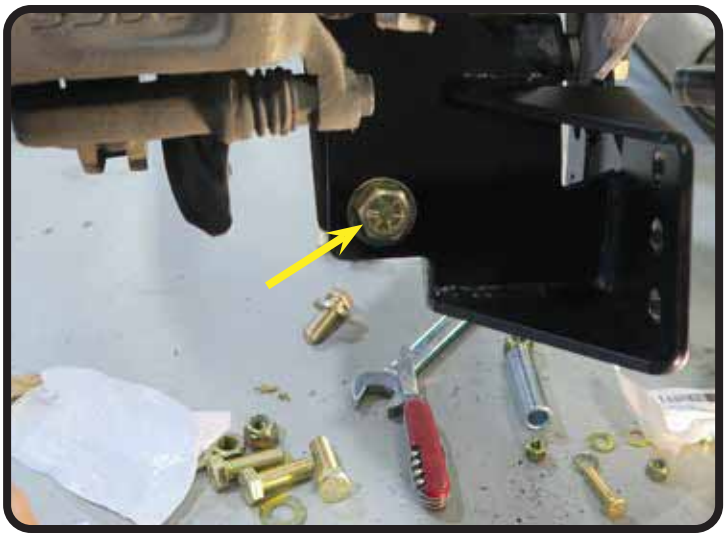


Figure 3

7. The upper hole must be drilled with a 1/2" bit. We recommend using a center punch and 1/8" bit to drill a pilot hole first. You may have to remove the caliper to gain access to the hole location.

The edge of the bracket should be parallel to the edge of the factory axle bracket (highlighted in Figure 4).

Figure 4

8. Install a 1/2" x 1.5" bolt and washer in the top hole, followed by a 1/2" washer and nylok nut on the threaded end of the bolt.

You may now torque all axle bracket and trailing arm hardware to **75 ftlbs**.

Figure 5

Upper/Lower Shock Mount Installation

9. Position the lower shock mount on the inboard plate of the axle bracket, and align the two holes in the shock mount with the lower two mounting holes on the axle bracket (Figure 6).

NOTE: You may also choose to use the top two mounting holes. This will raise the ride height approximately 1".

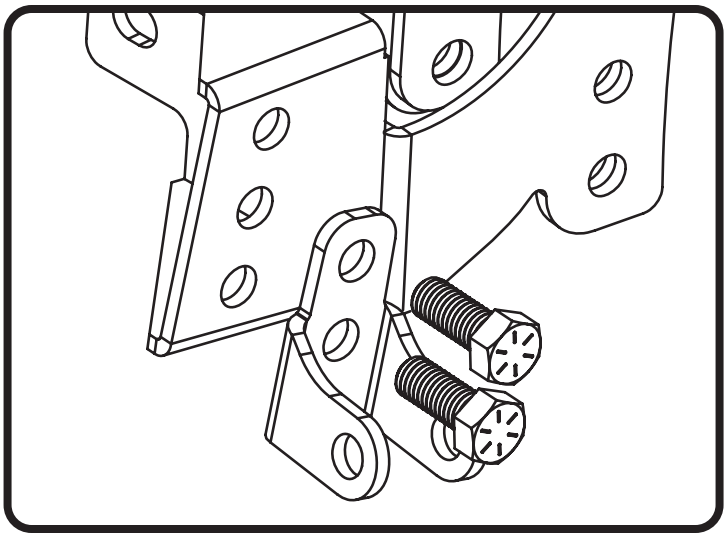


Figure 6

10. Install a 1/2" x 1.25" bolt in each hole, and secure each with a 1/2" nylok nut. Torque to **75 ft-lbs**.

Figure 7

11. Position the new upper shock mount bracket in the factory shock location. Install a 5/16" x 1.25" bolt with a 5/16" flat washer on each side, and secure with the 5/16" nylok nuts (Figure 8). Torque to **17 ft-lbs**.

NOTE: The bracket positon should be offset to the centerline of the car.

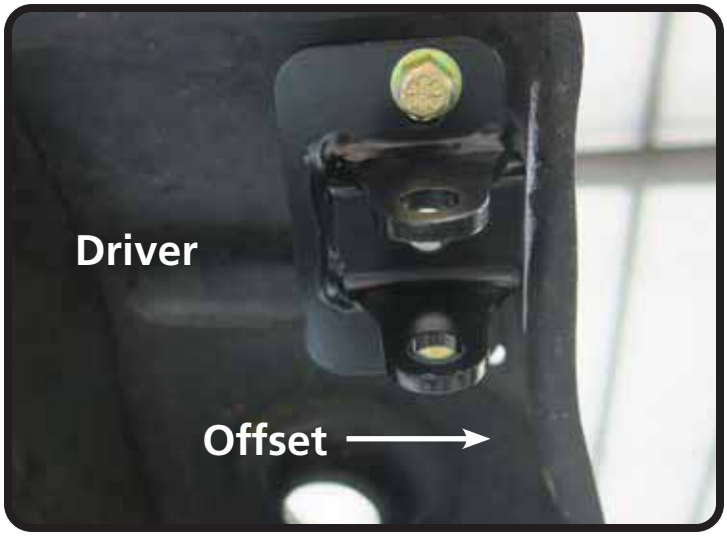


Figure 8

ShockWave Installation

12. Install a 90002043 shock spacer into each side of the eyelet bearing. The small end of the spacer will snap into the bearing (Figure 9).

Figure 9

13. Position the eyelet into the upper shock mount. Insert a 1/2" x 2.5" bolt through the mount/eyelet and secure with a 1/2" nylok nut (Figure 10).

Torque to **75 ft-lbs**.

Figure 10

14. Install a 90002043 shock spacer into each side of the lower ShockWave bearing.

15. Position the ShockWave into the lower shock mount. Insert a 1/2" x 2.5" bolt through the mount/eyelet and secure with a 1/2" nylok nut (Figure 11).

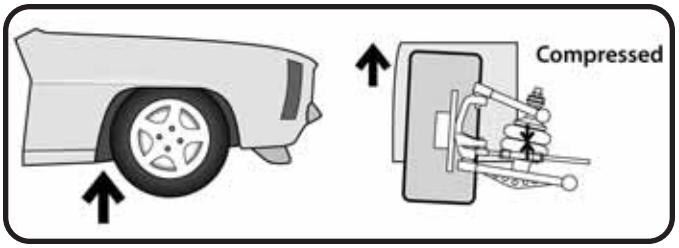
Torque to **75 ft-lbs**.

16. Repeat on the opposite side.

Figure 11

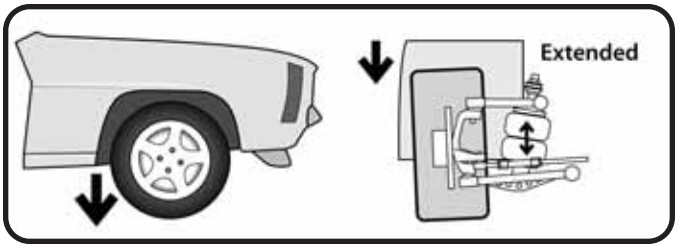
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



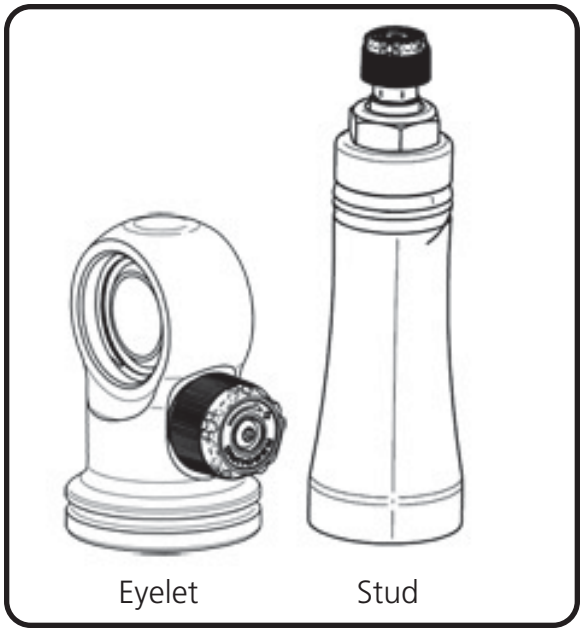
REBOUND

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?

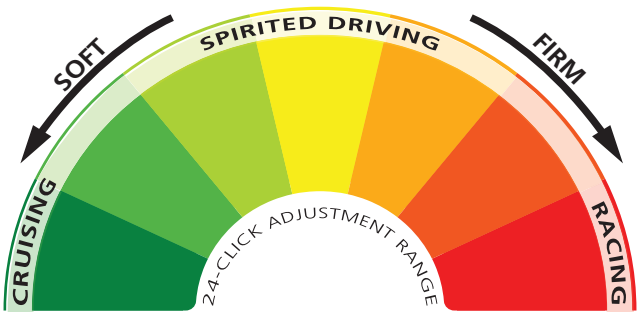
HQ Series Shocks

- **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.

SHOCK*WAVE* CARE GUIDE

PLEASE READ

The air spring locking ring IS NOT 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.**