ridetech

INSTALLATION INSTRUCTIONS

Part # 11221010

Front CoolRide Air Spring and HQ Shock Kit

1964-1972 GM A-Body

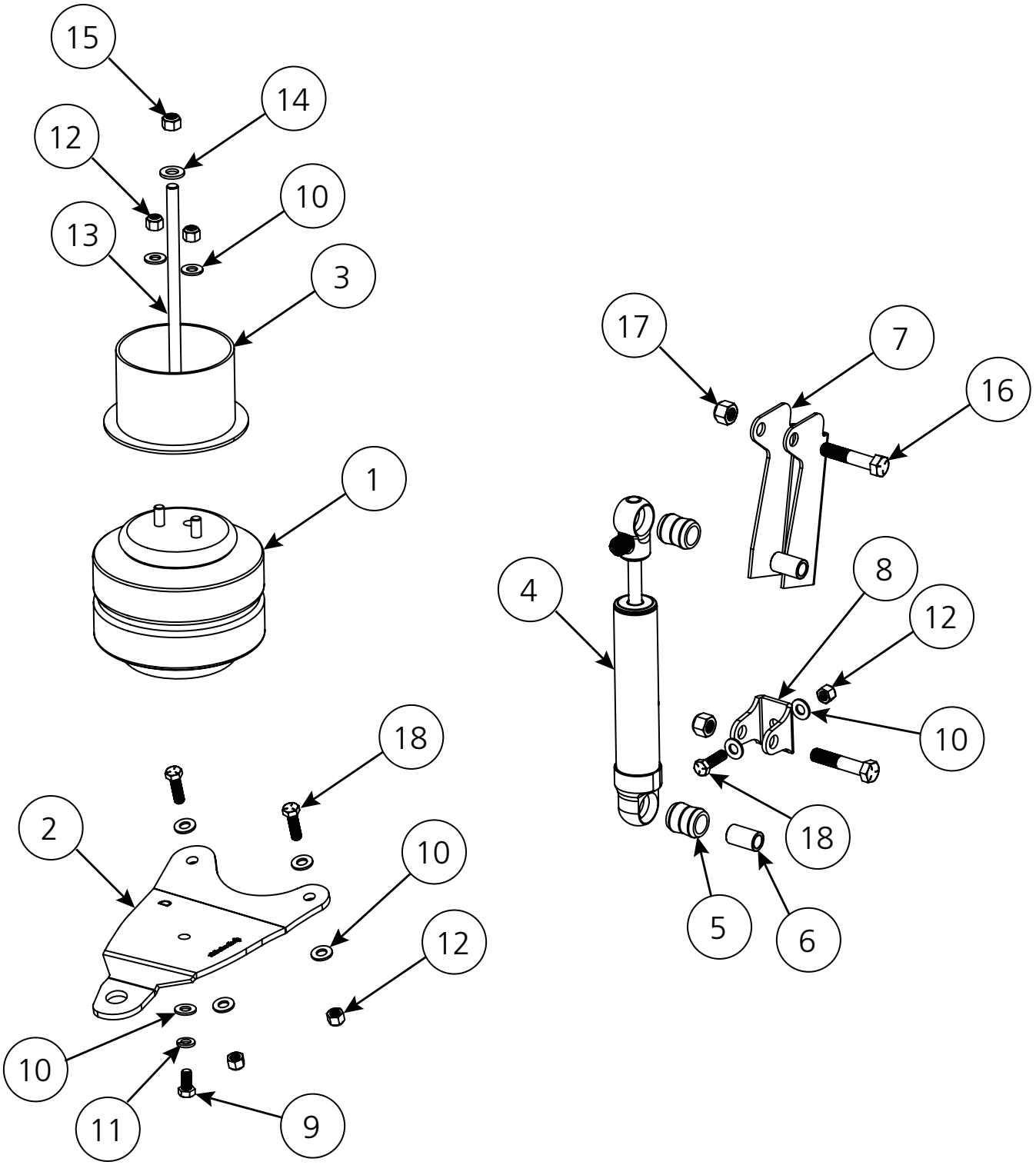
www.ridetech.com
812.482.2932

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
Components			
1	90006781	Air spring – 6.5" diameter, double convoluted, ¼" port	2
2	90000370	FRONT COOLRIDE PLATE- DRIVER	1
-	90000371	FRONT COOLRIDE PLATE- PASSENGER (Not Shown)	1
3	90000372	Upper Cup Bracket	2
4	986-10-036	4.75" Stroke HQ Shock Cartridge	2
5	70011138	¾" ID Shock Bushing	4
6	90002102	1/2" ID Inner Sleeve	4
7	90000011	Upper Shock Bracket	2
8	90000034	Lower Shock Bracket	2
Hardware			
Air Spring To Lower Bracket			
9	99371001	3/8"-16 x ¾" Bolt	2
10	99373003	3/8" SAE Flat Washer	2
11	99373005	3/8" Lock Washer	2
Air Spring To Upper Bracket			
10	99373003	3/8" SAE Flat Washer	4
12	99372002	3/8"-16 Nylok Nut	4
Upper Bracket To Frame			
13	99435001	7/16" x 6" Stud	2
14	99433002	7/16" SAE Flat Washer	2
15	99432001	7/16"-14 Nylok Nut	2
Shock To Upper & Lower Bracket			
16	99501003	½" x 2 ½" Bolt	4
17	99502001	½" Nylok Nut	4
Lower Shock Bracket To Lower Control Arm			
18	99371004	3/8"-16 x 1 1/4" Bolt	2
10	99373003	3/8" SAE Flat Washer	4
12	99372002	3/8"-16 Nylok Nut	2
Lower Mounting Plate To Arm			
18	99371004	3/8"-16 x 1 1/4" Bolt	4
10	99373003	3/8" SAE Flat Washer	8
12	99372002	3/8"-16 Nylok Nut	4

Air Spring Assembly & Lower Plate Installation

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

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

3. Apply thread sealant to the air fitting and screw it into the top of the air spring.

4. Place the upper cup bracket on top of the air spring and secure with two 3/8" Nylok nuts and flat washers (Figure 1).
Torque to **15-20 ft-lbs**.

5. Thread the 6" all-thread stud into the nut at the bottom of the cup (Figure1).

6. Position the lower air spring plate on the lower control arm. The large hole in the bracket will align with the sway bar hole on the lower arm (Figure 2).

7. Use the bracket to mark the location of the two mountiing holes in the lower control arm and drill the holes with a 3/8" bit. Fasten the plate with 3/8-16 x 1.25" bolts, 3/8" washers and Nylok nuts (Figure 3)
Torque to **15-20 ft-lbs**.

Figure 1

Figure 2

Figure 3

Air Spring Assembly & Lower Shock Mount Installation

8. Place the assembly into the coil spring pocket with the stud sticking through the factory shock hole. Mark the outside of the coil spring pocket where the air spring rubs. Remove the air spring and trim the pocket. A die grinder with a cutoff wheel works well for this (Figure 4).

9. Reinstall the air spring assembly (the air line can be routed at this time) and secure with a 7/16" Nylok nut and flat washer on top of the frame (Figure 5).
Torque to **25-35 ft-lbs**.

10. Fasten the air spring to the lower plate using a 3/8"-16 x 3/4" bolt, 3/8" lock washer and flat washer (Figure 6).
Torque to **15-20 ft-lbs**.

11. Install the lower shock mount just behind the steering stop on the lower control arm. Fasten the mount to the lower control arm using a 3/8"-16 x 3/4" bolt, flat washer and Nylok nut (Figure 7).
Torque to **15-20 ft-lbs**.

Figure 4

Figure 5

Figure 7

Figure 6

Upper Shock Mount & Shock Installation

12. The upper shock mount must be welded to the frame. It may need to be cut down to match the stroke of the air spring and suspension. Tack weld the mount for now (Figure 8 & 9).

13. Temporarily install the shock and verify that when the suspension is fully compressed, the shock is about ¼" from being fully compressed. Once you are satisfied with the shock travel and mount placement, remove the shock and finish welding the upper mount.

14. Mount the shock to the upper & lower mounts using the supplied 1/2"-13 x 2.5" bolts and Nylok nuts (Figure 10).
Torque to **65-75 ft-lbs**.

15. Check air spring clearance throughout full suspension travel. Allowing the air spring to rub may result in failure and void the warranty.

16. Repeat on the opposite side.

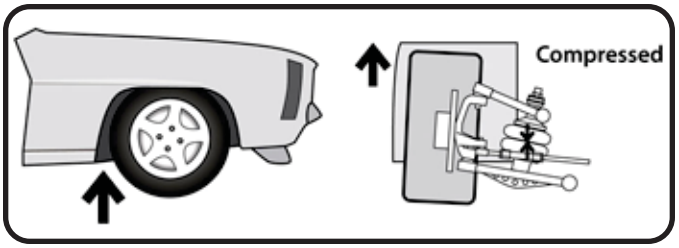
Figure 8

Figure 9

Figure 10

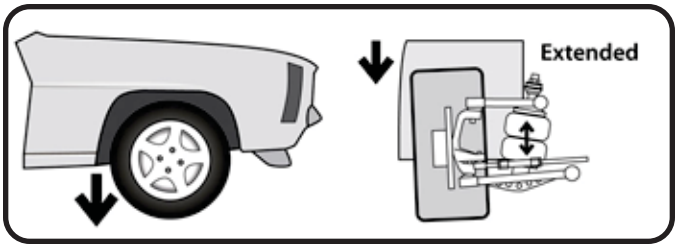
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



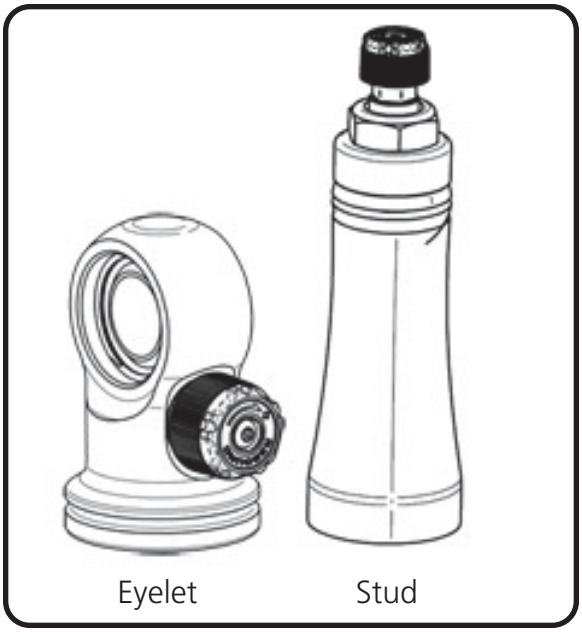
REBOUND

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?

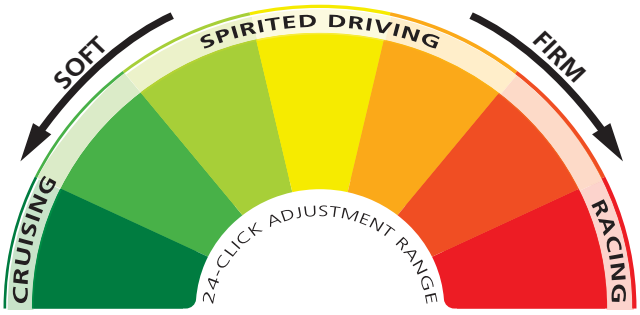
HQ Series Shocks

- **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.