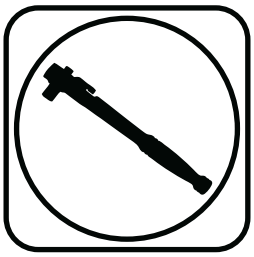
ridetech

Installation Instructions

Part # 13046210 - Mopar LX Platform HQ Rear Coil Overs

Recommended Tools



Mopar LX Platform HQ Series Rear Coil Overs

05-08 Magnum / 05-Up 300C / 06-Up Charger / 08-Up Challenger

Installation Instructions

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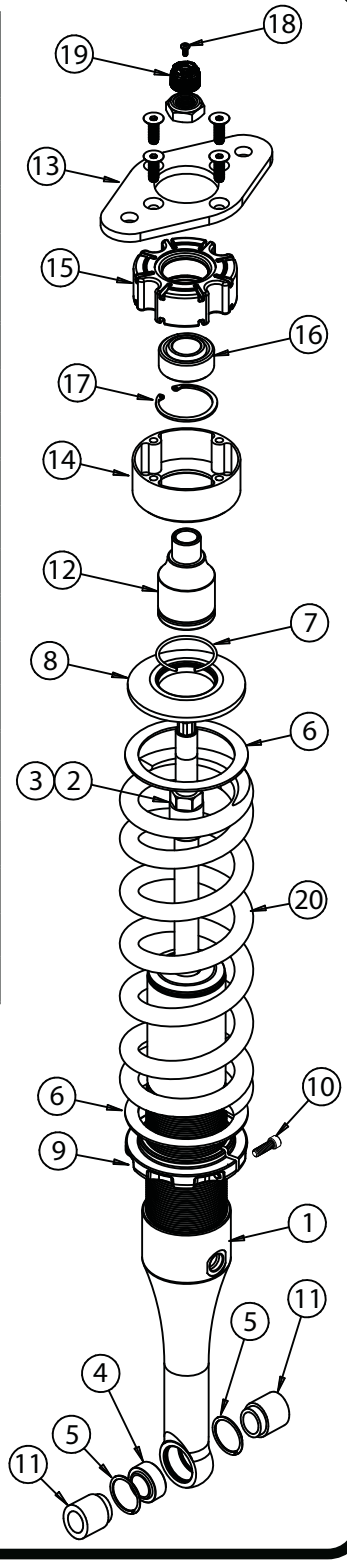
Major Components .....In the box

Item #	Part #	Description	QTY
1	24159997	5.2" Stroke HQ Series Shock	2
2	70012160	2.0" Stud Top Metering Rod (Installed in stud top)	2
3	90009988	2.0" Stud Top Assembly	2
4	90001994	5/8" ID Bearing	2
5	90001995	Bearing Snap Ring	4
6	70010828	Delrin Spring Washer	4
7	038-01-006-A	Upper Cap Retaining Ring	2
8	234-14-200	Upper Coil Spring Cap	2
9	234-15-200	Lower Coil Spring Preload Ring	2
10	99050001	M5-.8 x 18 mm SHCS - Preload Ring Locking Screw	2
11	90002443	Shock Bearing Spacers	4
12	90003605	Coil Spring Cap To Upper Bearing	2
13	90003609	Upper Shock Mounting Plate	2
14	90003590	Strut Isolator Retaining Cup	2
15	70016907	Upper Strut Isolator	2
16	90001042	Upper Strut Bearing	2
17	90000805	Upper Strut Bearing Retaining Ring	2
18	90009969	4-40 x 1/4" Pan Head Torx Cap - Adjuster Knob	2
19	210-35-120-0	Adjuster Knob	2
20	59100325	10" 325lb Coil Spring	2



Disassembly

1. Raise the vehicle to a safe and comfortable working height with the suspension hanging freely. You will need a jack under the lower control arm to help support it during the installation.

2. Remove the rear wheels to allow access to the suspension.

3. The OEM shocks and springs will need to be removed from the rear of the car. Retain the OEM hardware for installation of the new Coil Over.

4. Remove the OEM upper shock mounting bolts. Retain them for reassembly.

5. Remove the OEM lower shock mounting bolt. Retain them for reassembly.

6. Disconnect the sway bar linkage from the suspension knuckle. Retain the OEM hardware for reassembly later.

Disassembly and Coil Over Installation

7. Push down on the brake rotor to pop the coil spring out of the car.

8. Be sure to remove the upper and lower coil spring isolators from the car.

9. Install a bearing spacer in each side of the Bearing. The SMALL part of the spacer inserts into the inside diameter of the shock bearing.

Coil Over Installation

10. Insert the coil over into the car. The bottom of the coil over will slip into the control arm.

11. Align the mounting holes of the upper plate with the OEM shock mounting holes. Install the OEM hardware that you removed during disassembly. Torque to 46 ft-lbs.

12. It helps to put a jack under the lower control arm to help support the suspension during the installation of the lower shock bolt. Align the mounting holes with the lower shock bearing/spacers. Insert the OEM bolt from the front side with the threads pointing to the rear of the car.

Coil Over Installation

13. Install the OEM nut on the bolt. Torque to 96 ft-lbs.

14. Reattach the sway bar linkage to the suspension knuckle. Align the mounting holes and insert the OEM bolt.

15. Install the OEM nut on the sway bar linkage bolt. Torque the nut to 45 ft-lbs.

Coil Spring Adjustment

16. Preload the springs of the Coil Over 1 1/2" to start. **Steps 16a - 16e** will assist you with preloading the coilspring. You may need to adjust the amount of preload in the spring, but this will be determined after the vehicle has been sat on the ground.

16a. Verify the adjuster nut locking screw is installed in the adjuster nut, but not tight.

16b. Thread the spring adjuster nut up the shock body until it is snug against the spring. You should NOT be able to move the spring up and down on the shock (0 preload). Verify the dropped upper coilspring cap is seated correctly on the upper shock stud.

16c. Measure from the bottom of the adjuster nut to the flat of the shock. You may want to write the measurement down.

16d. Using a spanner wrench, thread the adjuster up the shock the additional amount specified in Step 16 (from the measurement you took in step 16c) to preload the spring.

16e. Lock the adjusting nut in place by tightening the adjuster nut locking screw.

17. Reinstall the wheels and tires and set the vehicle back on the ground.

18. After entire weight of vehicle is on the wheels, jounce the suspension and roll the car forward and backward to alleviate suspension bind. **THIS IS NECESSARY BEFORE MEASURING RIDE HEIGHT.**

19. If you determine you need to adjust the ride height of the suspension after getting the vehicle on the ground, **Steps 19a - 19e** will assist you in adjusting the ride height.

19a. Raise the vehicle and support it by the frame, allowing the suspension to hang freely. You do NOT need to remove the wheels.

19b. Loosen the locking screw in the adjuster nut, but do not remove the locking screw.

19c. Measure from the bottom of the adjuster nut to the flat of the shock. You may want to write the measurement down.

19d. Using a spanner wrench, thread the adjuster up or down the shock to obtain the correct ride height. One complete revolution of the adjuster nut is approximately 1/8" at the wheel. Threading the adjuster nut up the shock will raise the ride height, threading it down will lower the ride height.

19e. Lock the adjusting nut in place by tightening the adjuster nut locking screw.

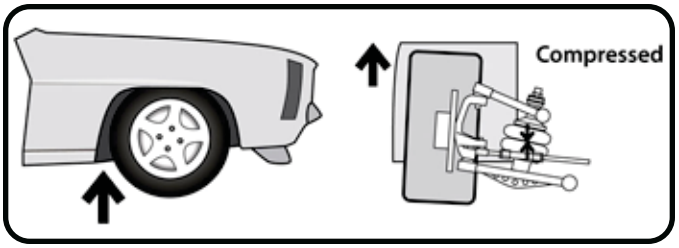
20. Set the vehicle back on the ground.

21. After entire weight of vehicle is on the wheels, jounce the suspension and roll the vehicle forward and backward to alleviate suspension bind. **THIS IS NECESSARY BEFORE MEASURING RIDE HEIGHT.**

22. Recheck your ride height. If you need to readjust, repeat **Steps 19-21**.

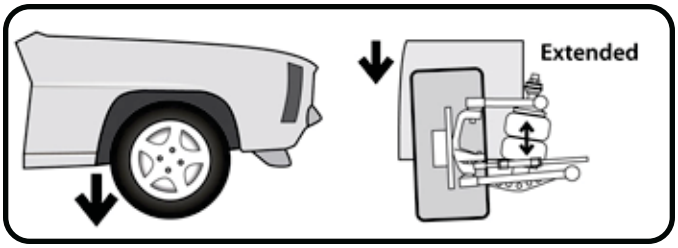
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



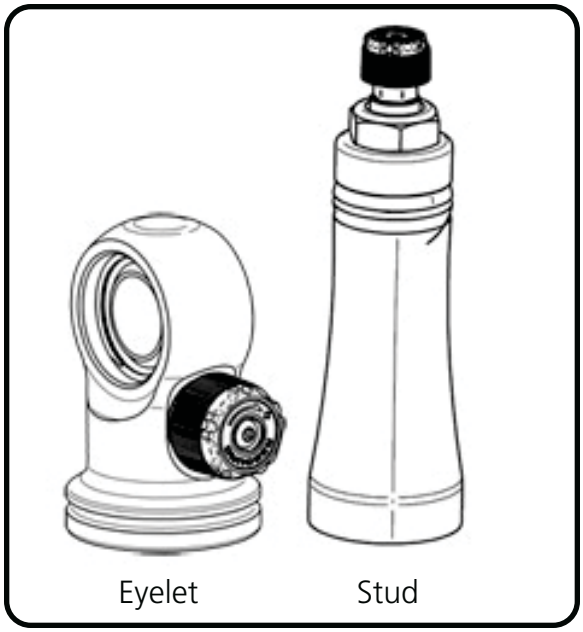
REBOUND

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?

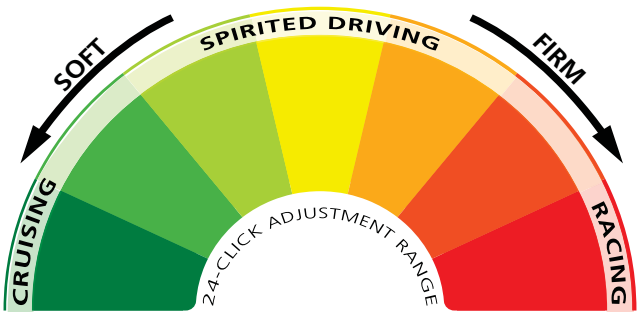
HQ Series Shocks

- **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 acheived.

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 noticable, 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.