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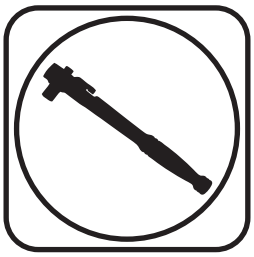
Installation Instructions

Part # 12156110 - 2005 up Mustang HQ Rear CoilOvers

Recommended Tools



2005 up Mustang HQ Series Rear CoilOvers

Installation Instructions

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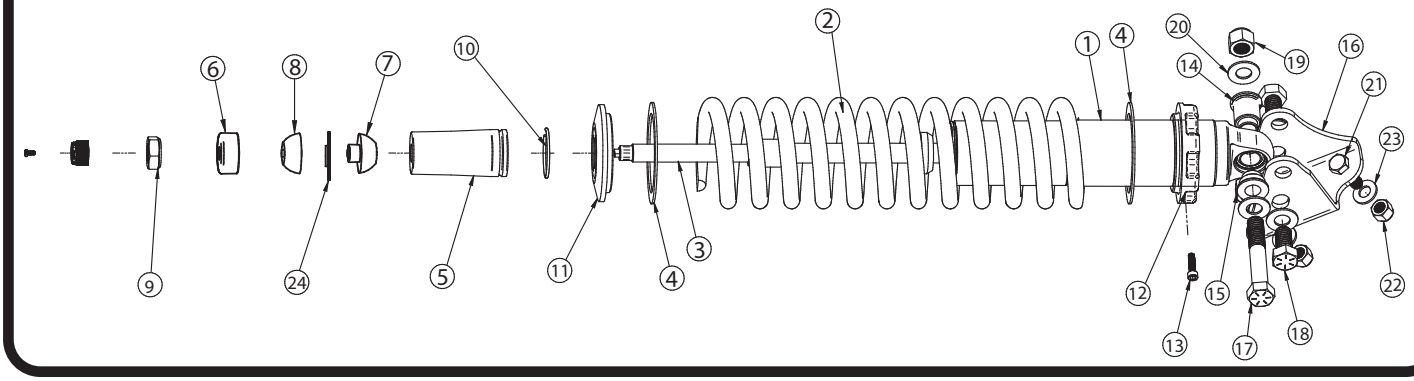
Major Components .....In the box

Item	Part #	Description	QTY
1	803-00-199	5.2" Stroke HQ Series Shock	2
2	59120225	12" 225lb CoilSpring	2
3	90009993	3.75" Stud Top	2
4	70010828	Delrin CoilSpring Washer	4
5	90002447	3.75" Stud Top Base	2
6	90001902	Aluminum Cap for Delrin Ball	2
7	90001903	Lower Delrin Ball Half	2
8	90001904	Upper Delrin Ball Half	2
9	99562003	9/16-18" Nylok Nut	2
10	803-00-199(kit)	CoilSpring Plate Retaining Ring (803-00-199 kit)	2
11	803-00-199(kit)	Upper CoilSpring Retaining Plate (803-00-199 kit)	2
12	803-00-199(kit)	Lower Spring Adjuster Nut (803-00-199 kit)	2
13	803-00-199(kit)	Adjuster Nut Locking Screw (803-00-199 kit)	2
14	90002462	Inner (WIDE) Lower Shock Spacer	2
15	90002043	Outer NARROW) Lower Shock Spacer	2
16	90002458	Driver Lower Shock Mount	1
16	90002459	Passenger Lower Shock Mount (Not Shown)	1
17	99501004	1/2"-13 x 3" Hex Bolt (Lower Shock Bolt to Mount)	2
18	99501001	1/2"-13 x 1" Hex Bolt (Lower Mount to Axle)	4
19	99502001	1/2"-13 Nylok Nut (Lower Shock & Mount Bolts)	6
20	99503001	1/2" SAE Flat Washer	8
21	99371004	3/8"-16 x 1 1/4" Hex Bolt (Lower Mount to Axle)	4
22	99372002	3/8"-16 Nylok Nut	4
23	99373003	3/8" SAE Flatwasher	4
24	90000582	T-Bushing	2
	90001995	Bearing Snap Ring (Installed in Shock Body)	4
	90001994	5/8" ID Bearing (Installed in Shock Body	2



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Installation Instructions

Getting Started and Disassembly

Congratulations on your purchase of the Ridetech Mustang CoilOver System. This system has been designed to give your Mustang excellent handling along with a lifetime of enjoyment. The CoilOver System provides flexibility that can not be achieved with Conventional CoilSprings. The CoilOver System will give you the flexibility of adjusting your ride height along with numerous spring options to dial in your ride quality to your personal preference.

This CoilOver System is Designed to replace the factory Shock and CoilSprings.

1. The rear OEM Shocks, Bumpstops and CoilSpring will need to be removed from the Rear of the car.

2. Raise the vehicle and support it by the frame allowing the suspension to hang freely. Be sure the rear differential will be able to swing down to get the rear springs out.

3. Place a jack under the center of the rear differential and raise it up to the point the jack is touching the rear differential. Be sure that the car is high enough that you will be able to lower the jack supporting the rear differential to remove the Coilsprings.

4. Pull the carpet on the sides of the trunk to expose the upper shock attaching nut and remove the nut.

5. Unbolt the lower shock from the shock mounting bracket.

6. Lower the jack slowly to remove the tension of the Coilspring. Pay attention to the brake line and ABS wire that you don't damage them when lowering the differential

7. With the springs loose, remove the from the car.

8. Remove the OEM bumpstop from the rear differential.

9. Remove the plastic cap from the differential in the factory coilspring location

Refer to the next page for coil-over assembly.

COILOVER ASSEMBLY INSTRUCTIONS

1. Thread the preload adjustment nut onto the shock from the bottom (Figure 1). A few threads of engagement is ok for now.

Figure 1

2. If it has not been removed already, remove the small plastic shipping spacer in the split of the adjustment nut (Figure 2).

Figure 2

3. Slide a Delrin washer over the shock and onto the adjustment nut (Figure 3).

Figure 3

4. Slide the coil spring over the shock, onto the adjustment nut (Figure 4).

Figure 4

COILOVER ASSEMBLY INSTRUCTIONS

5. Slide a Delrin washer over the stud top and place on top of the coil spring, followed by the upper spring mount (Figure 5).

Figure 5

6. Slide the retainer clip over the adjustment knob and into the groove at the bottom of the stud top base. Make sure it snaps into place and is fully seated in the groove (Figure 6).

Figure 6

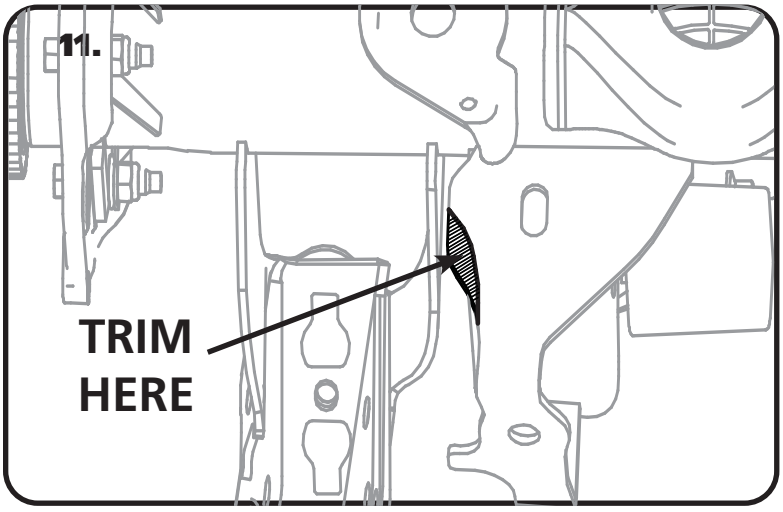
7. Thread the adjustment nut up the shock body to remove the slack and secure the spring and upper mount against the stud top base.
Install the locking screw in the adjustment nut, but do not tighten yet (Figure 7).
This screw will be tightened after your preload has been set.

Figure 7

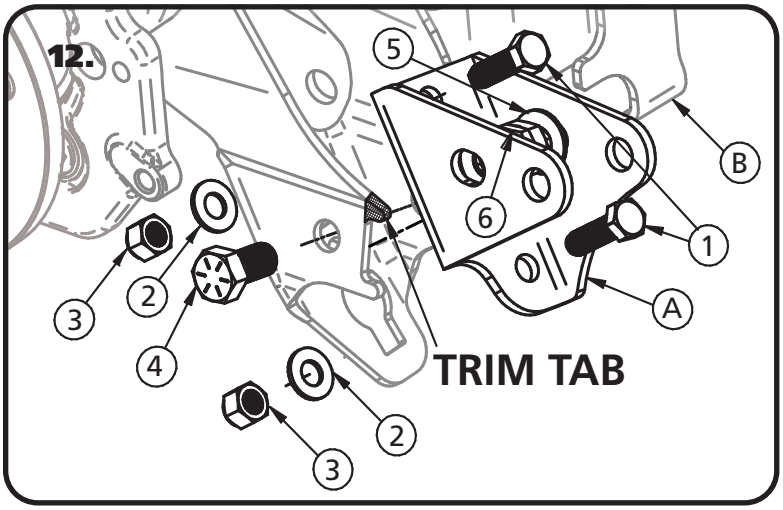
8. Your assembled coilover is ready to be installed on the vehicle.

Figure 8

CoilOver Installation



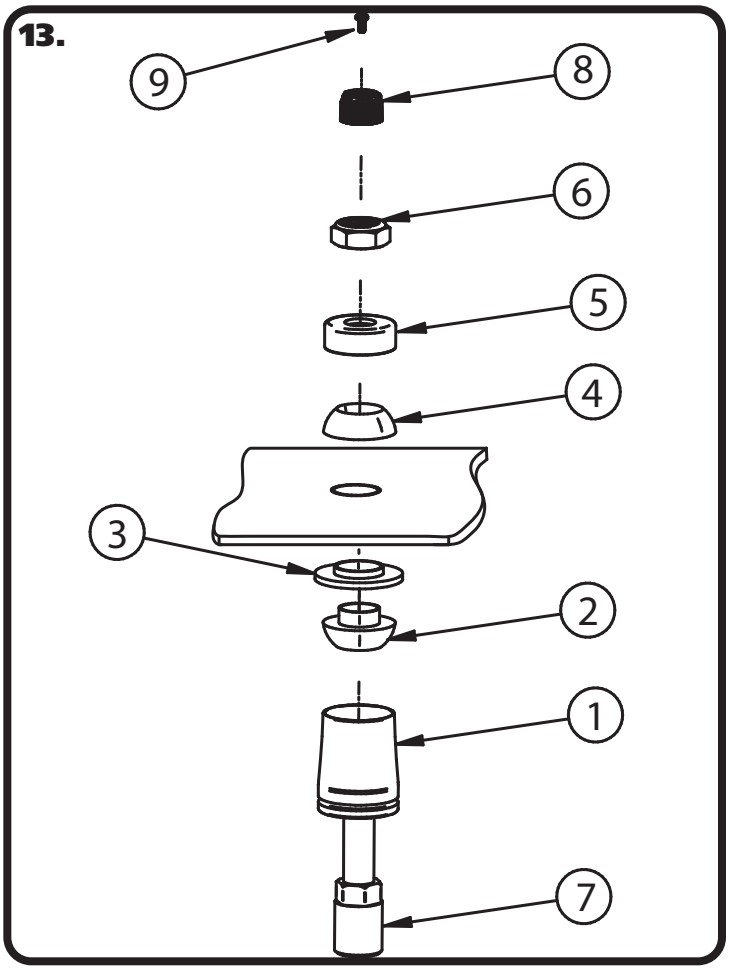
11. Before installing the CoilOvers it is necessary to do some trimming on the rear differential brackets for clearance. The corner of the panhard mount on the drivers side needs to be clearanced like seen in Figure #11.



12. Trim the tab shown in the illustration. Insert the new Lower Shock Mount (A) into the OEM Shock Mount (B). Attached the Mount using 3/8"x 1 1/4"(1) Bolts in the front face of the bracket. Install a 3/8" Flat Washer (2) and 3/8" Nylok Nut (3) onto the bolts. Insert a 1/2" x 1" Hex Bolt (4) through the OEM shock mounting hole. Install a 1/2" Flat Washer (5) and 1/2" Nylok Nut (6) onto the Bolt. Tighten all Hardware.

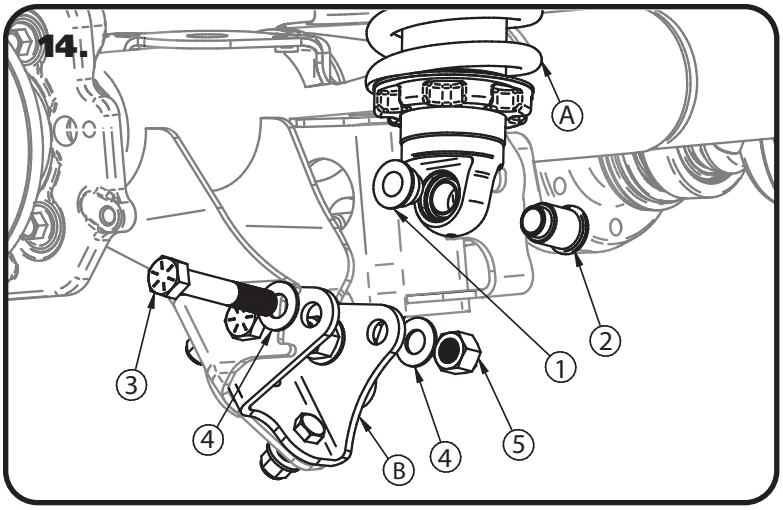
Note: The 1/2" Bolts must be install with the Nylok Nuts in the inside of the bracket.

CoilOver Installation



13. Place the coil-over into the original shock location with the stud sticking through the OEM shock hole. See Figure 13. Tighten the 9/16" nut snuggly against the top cap (#5). Do not over tighten. You should still be able to articulate the shock by hand. We torque the nut to 80 in-lbs using a 7/8" crowfoot wrench.

1. Stud top aluminum base
2. Delrin ball lower half
3. T-Bushing Adapter
4. Delrin ball upper half
5. Aluminum cap
6. 9/16" SAE Nylok jam nut
7. Threaded stud (screwed onto shock shaft)
8. Rebound adjusting knob
9. Screw

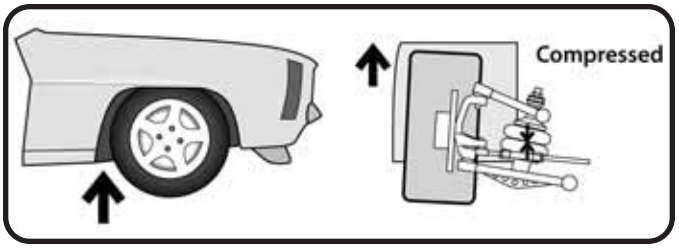


14. Install the CoilOver(A) in the OEM lower shock mount(B) using a Narrow Spacer(1) on the wheel side of the shock, and a Wide Spacer(2) on the inner side of the shock. Slide the shock into the stock mounting location. It may be necessary to use the jack and raise the differential to align the mounting holes. With the mounting holes aligned, insert a 1/2"-13 x 3" Bolt (3) and 1/2" Washer (4) through the Mount and Shock. Install a 1/2" Flat Washer (4) and 1/2"-13 Nylok Nut (5) on the Bolt and Tighten.

Repeat the steps for the other side of the car.

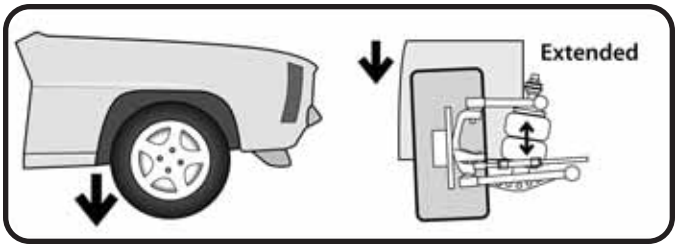
TUNING GUIDE
SINGLE-ADJUSTABLE SHOCKS

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.



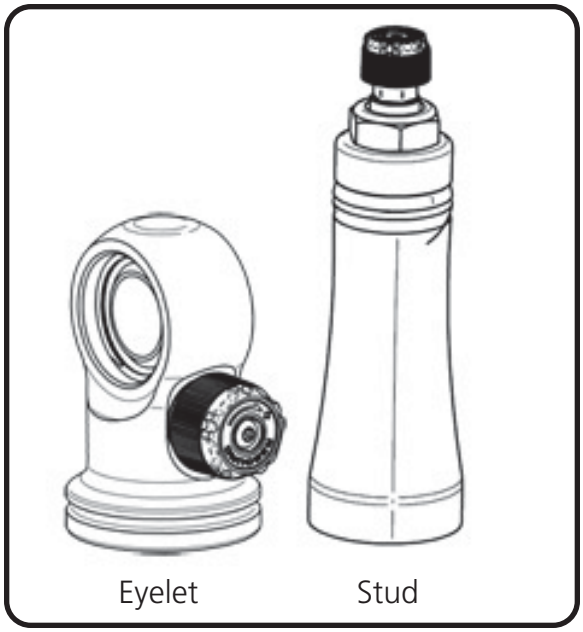
REBOUND

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?

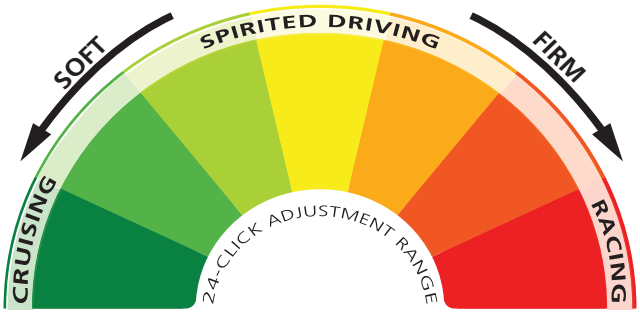
HQ Series Shocks

- **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.