



### Part # 12270298 - 2015-up Mustang Air Suspension System

#### Recommended Tools

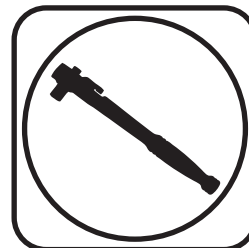
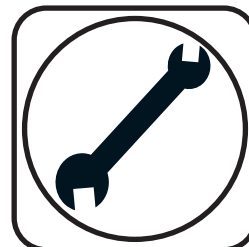
##### Front Components:

12272401 Front ShockWave Strut Instructions

##### Rear Components:

12274099 Rear CoolRide Instructions

12270701 Rear HQ Series Shocks



## 2015-up Mustang Level 2 ShockWave Installation Instructions

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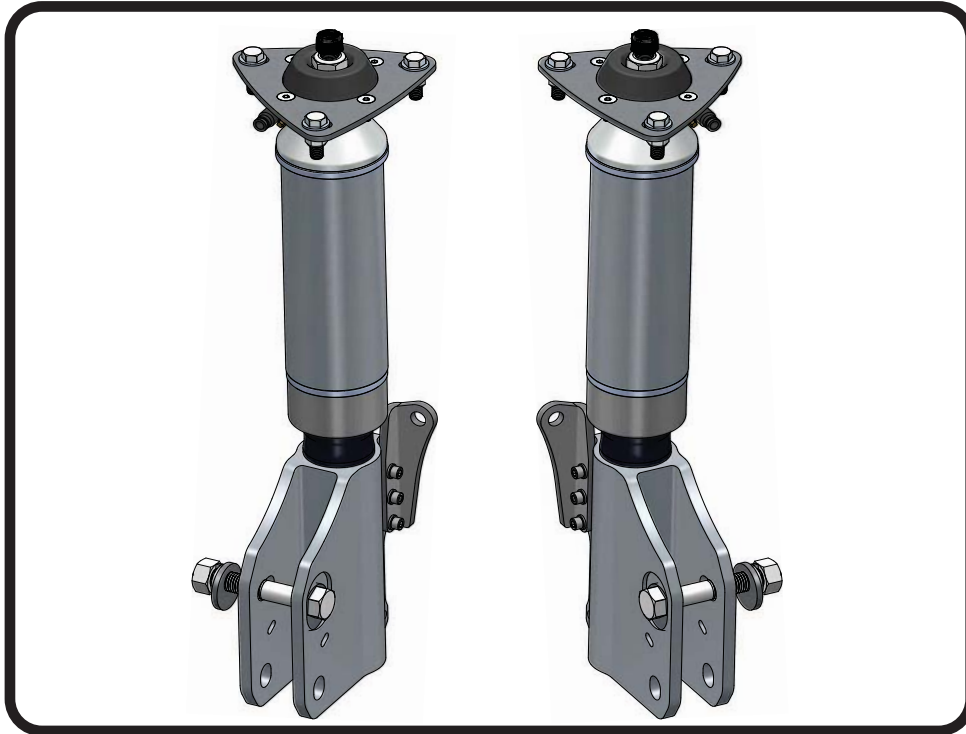
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**THE REAR SHOCKS IN THIS KIT WILL NOT FIT THE GT350!!**

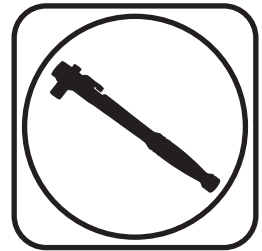




### Part # 12272401 -2015 up Mustang



#### Recommended Tools



## 2015 up Mustang Front HQ AirStrut Installation Instructions

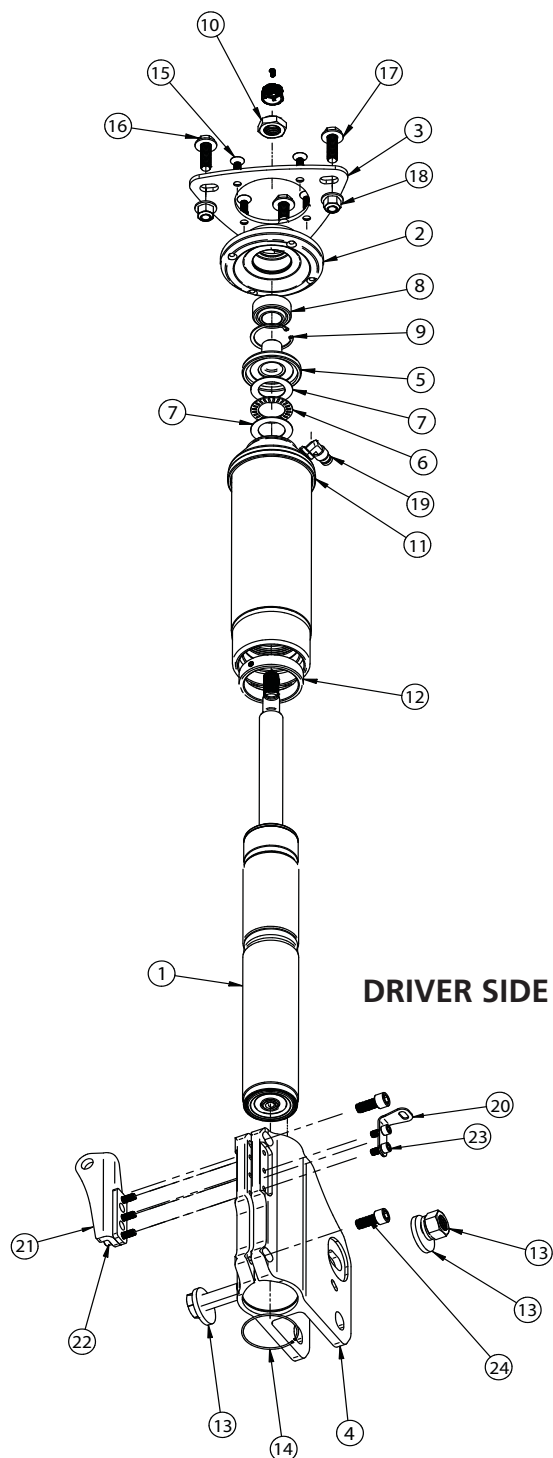
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Page 7.....	Strut Adjustment



### Included Components .....In the box

Item #	Part #	Description	QTY
1	986-10-055	Strut Cartridge	2
2	90002540	Bearing Retaining Mount	2
3	90002541	Upper Mounting Plate	2
4	70012842	Lower Strut Mount	2
5	90002368	Thrust Bearing Adapter	2
6	70010987	Thrust Bearing	2
7	70010988	Thrust Bearing Washer	4
8	90001042	Upper Mount Bearing	2
9	90000805	Upper Bearing Snap Ring	2
10	99562003	9/16"-18 Nylok Nut	2
11	21090798	AirStrut Air Spring	2
12	234-00-153	Air Spring Locking Ring	2
13	90000801	Eccentric Bolt	2
14	038-01-035	Strut Retaining Ring	2
15	72000008	1/4"-20 x 3/4" Flat SHCS	8
16	99371004	3/8"-16 x 1 1/4" Hex Bolt	6
17	99373003	3/8" Flatwasher	12
18	99372002	3/8'-16 Nylok Nut	6
19	31954201	90 Degree 1/4" Air Fitting	2
20	70012908	ABS Tab	2
21	90002692	Sway Bar Tab Assembly (Driver)	1
21	90002693	Sway Bar Tab Assembly (Pass)	1
22	99251010	1/4"-20 x 1" SHCS	6
23	99251008	1/2"-20 x 1/2" SHCS	4
24	99371054	3/8"-16 x 7/8" SHCS	4
	99055000	Locking Ring Set Screw	2



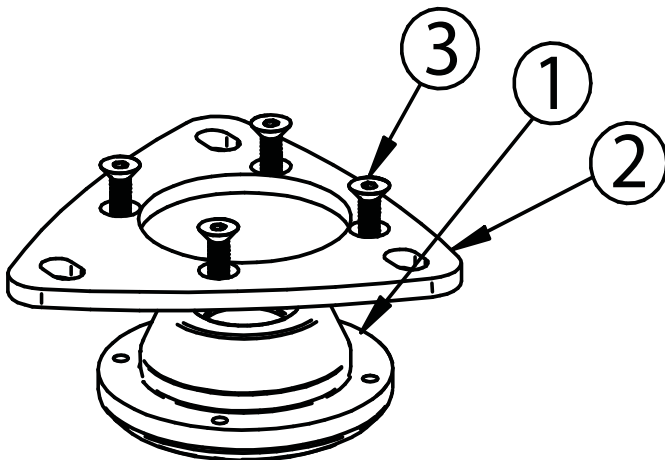


### Disassembly

1. Remove the front struts by first disconnecting the ABS wire from the factory strut.
2. Disconnect the swaybar linkage from the strut.
3. Support the front hub and control arm assembly and remove the (2) struts bolts(retain hardware) that attach the strut to the spindle.
4. Remove the (3) nuts holding the upper strut mount to the car body. **DO NOT REMOVE THE CENTER NUT.**
5. Remove strut assembly from the car.

### Getting Started

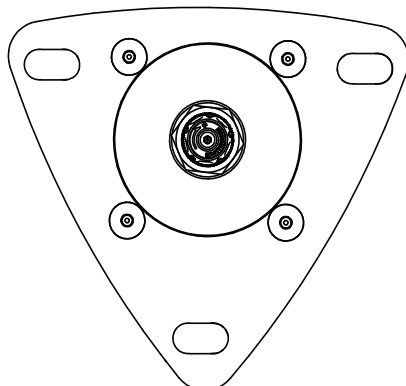
6.



6. The upper will need to be assembled. The plate is positioned with the counter sunk holes up. Insert the Aluminum Bearing Mount into the Plate from the BOTTOM. The center of the Aluminum mount will stick up through the plate. Apply Red Loctite to the threads of (4) 1/4"-20 x 3/4" Flat Head Socket Cap Screws. Thread the 4 Caps Screws into the aluminum mount and Torque them to 11ftlbs.

7.

DRIVER SIDE



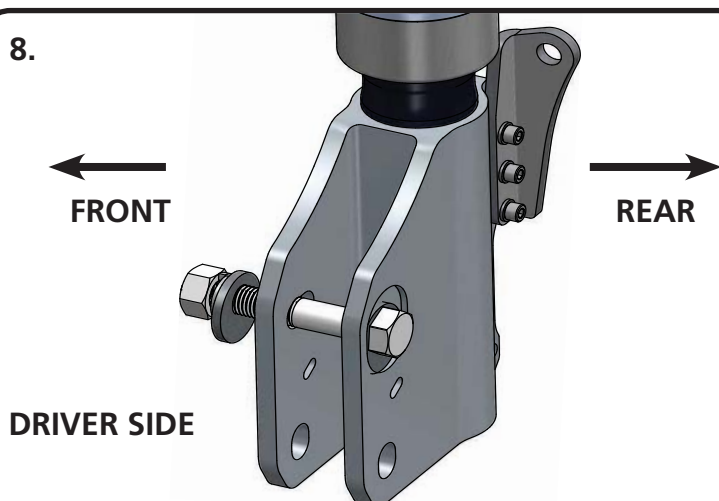
WHEEL SIDE

7. The upper strut mount is slotted to provide additional caster adjustment. The upper mount has the top of the strut offset to the inside of the car for tire clearance. It is positioned with the slots running front to rear and strut mount inset toward the engine.



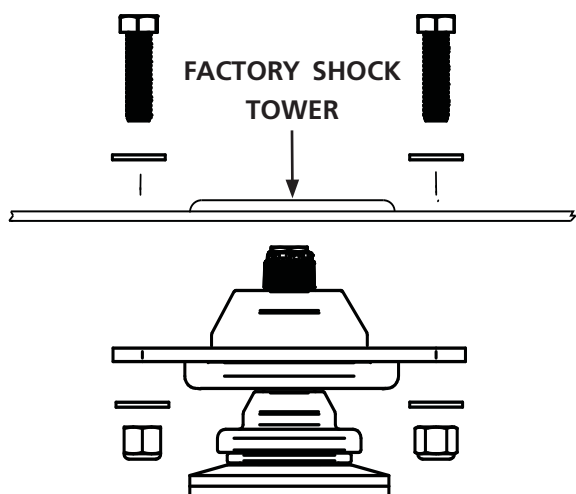
### Strut Assembly

8.



8. There is a Driver and Passenger Strut Assembly. The Sway Bar Tab is to the REAR of the car. **Image 8** shows the Driver Assembly.

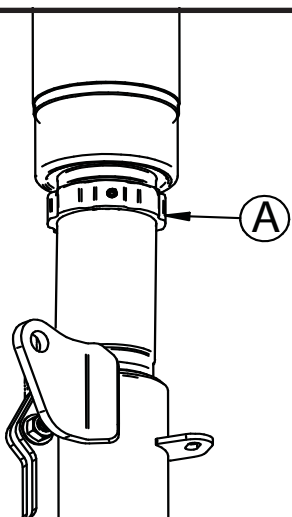
9.



9. Bolt the upper mount into the car, positioning it to the **bottom** side of the Strut Tower. The plate gets bolted in from the **bottom** side of the strut tower using (3) 3/8" - 16 x 1 1/4" bolts. Slide the Plate to the **REAR** of the Car for an initial setting. Install a 3/8" washer on the top and bottom and secure it with (3) 3/8" 16 Nylok Nuts. Tighten all (3) down.

**Note:** The camber adjustment will be done on the bottom of the strut using the supplied camber bolt.

10.

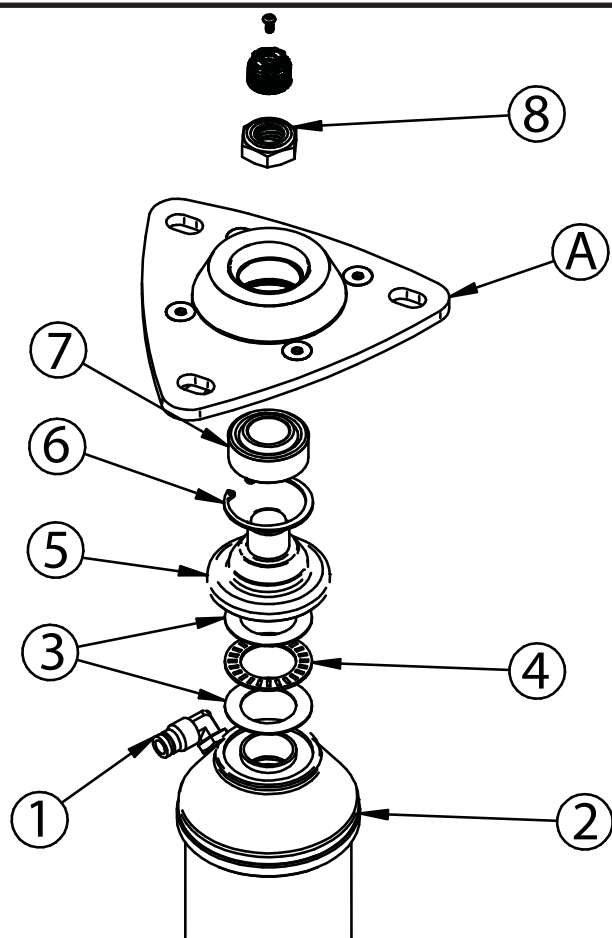


10. The Strut has a Locking Ring[A] that locates the Air Spring, **NEVER change the location of the Locking Ring. This locking ring is preset to optimize the stroke of the air spring with the stroke of the strut. NEVER REMOVE THE AIR SPRING FROM THE STRUT.**



### Assembly

11.



11. Install the Air fitting into the Air Spring using thread tape. Remove the Adjuster Knob from the Strut shaft for assembly. Bolt the strut assembly into the upper mount (A), see **Image 11** for assembly order. **NEVER REMOVE THE AIR SPRING FROM STRUT.**

1. 90 Degree Air Fitting
2. Air Spring
3. Torrington Bearing Races
4. Torrington Bearing
5. Bearing Adapter (Small Diameter Up)
6. Upper Mounting Bearing Snap Ring
7. Upper Mounting Bearing
8. 9/16" Locknut

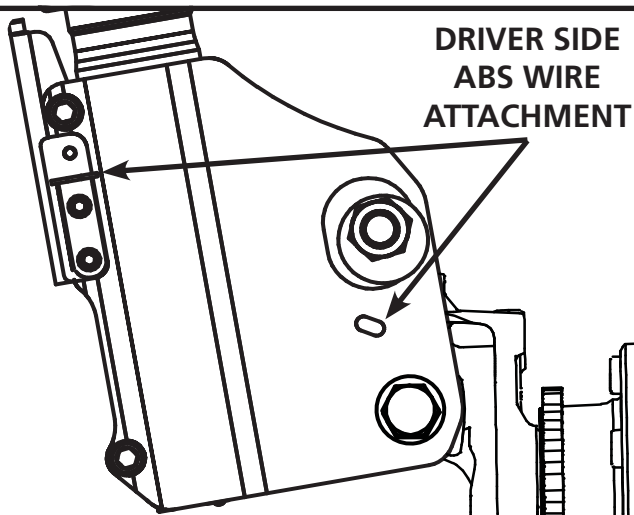
Assemble components and install into upper mount tightening upper nut. Reinstall upper adjustment knob.

12. Slide the lower strut mount onto the spindle. Reuse the Factory hardware in the lower mounting hole. Insert the supplied Camber bolt into the top hole.

**NOTE: THE STRUT TO SPINDLE ATTACHING BOLTS WILL NEED TO BE TORQUED TO 150 FTLBS TO KEEP IT FROM MOVING.**

### Lower Strut Attachment

12.



13. Reattach the OEM sway bar linkage to the strut housing using the OEM hardware.

14. Snap the ABS Wire into the Strut Mounts Attachment provisions pointed out in **Image 12** using the OEM retaining Clip that is attached to the Wire. Route the Airline to the Air Spring. When hooking up the Airline be sure that you can turn the steering from lock to lock with out tugging on the Airline. This situation will eventually cause the line to leak.



### Strut Adjustment

#### Strut Adjustment 101- Single Adjustable

##### Rebound Adjustment:

How to adjust your new struts.

The rebound adjustment knob is located on the top of the Strut protruding through the upper mount.

You must first begin at the ZERO setting, then set the shock to a soft setting of 20.



-Begin with the Strut adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.

-Now turn the rebound adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use).

**Take the vehicle for a test drive.**



-If you are satisfied with the ride quality, do not do anything, you are set!

-If the ride quality is too soft increase the damping effect by rotating the rebound knob clock wise 3 clicks.

**Take the vehicle for another test drive.**



-If the vehicle is too soft increase the damping effect by rotating the rebound knob clock wise 3 additional clicks.

-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

##### Note:

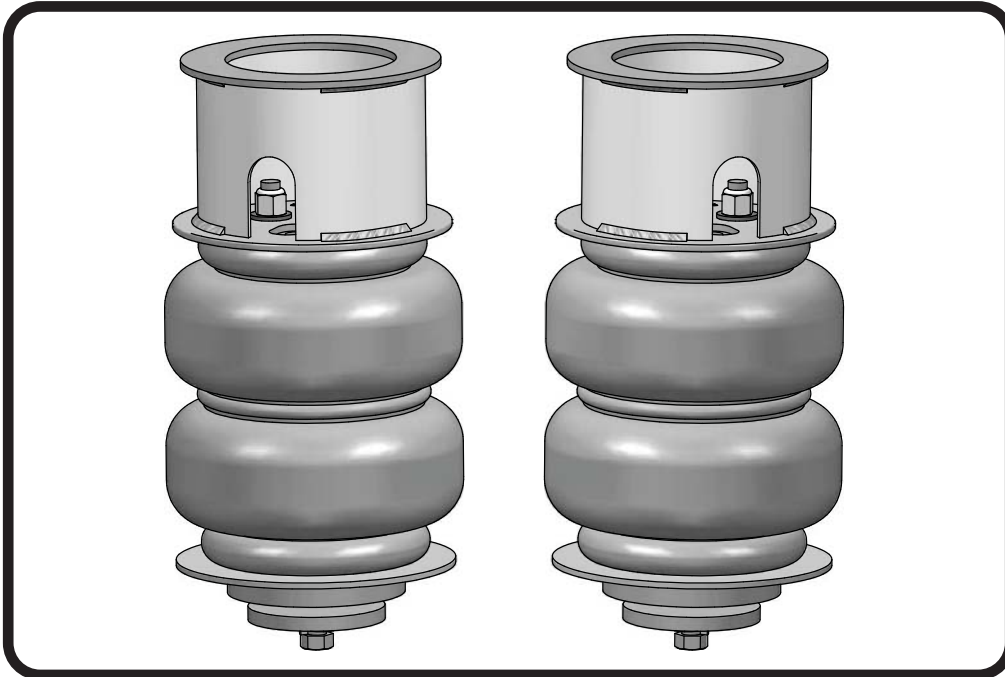
**One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.**





**Part # 12274099 - 2015 up Mustang Rear CoolRide**

Recommended Tools



**2015 up Mustang Rear CoolRide**

## Installation Instructions

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Page 10..... CoolRide Installation  
Page 11..... CoolRide Installation

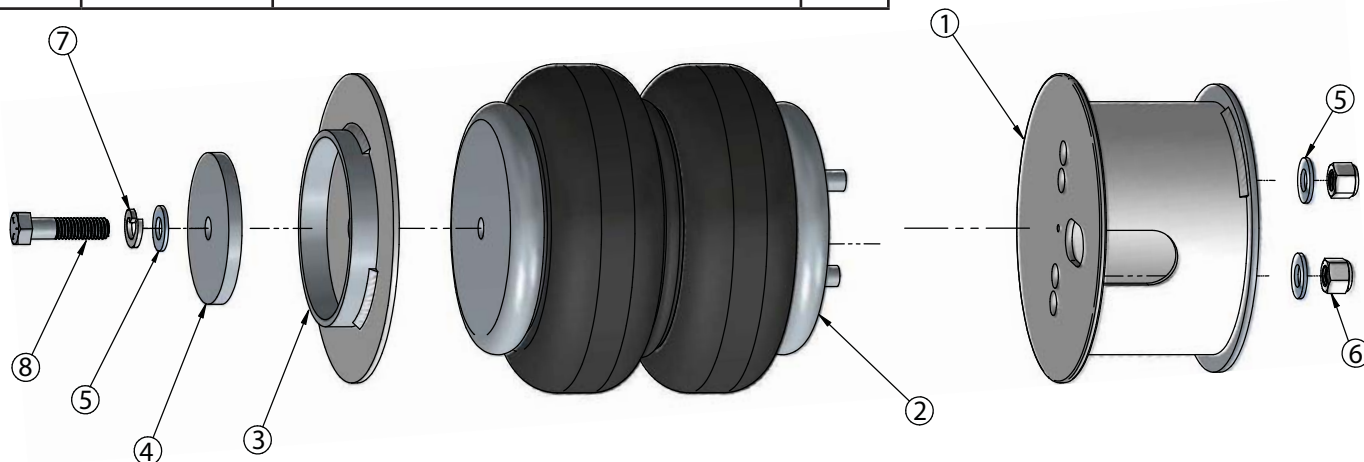






### Major Components .....In the box

Item	Part #	Description	QTY
1	90002484	Upper Cup Bracket	2
2	90006781	6.5" Diameter Air Spring	2
3	90002485	Lower Cup Bracket	2
4	90002486	Lower Clamping Plate	2
5	99373003	3/8" Flat Washer	6
6	99372002	3/8"-16 Nylok Nut	4
7	99373005	3/8" Split Lock Washer	2
8	99371006	3/8"-16 x 1 1/2" Hex Bolt	2



### Getting Started and Disassembly

Congratulations on your purchase of the Ridetech Mustang CoolRide System. This system has been designed to give your Mustang excellent handling along with a lifetime of enjoyment. The CoolRide System provides flexibility that can not be achieved with Conventional Coil Springs. The CoolRide System, used in conjunction with HQ Series rear shocks, will give you the flexibility of adjusting your ride height along with the ability to dial in your ride quality to your personal preference.

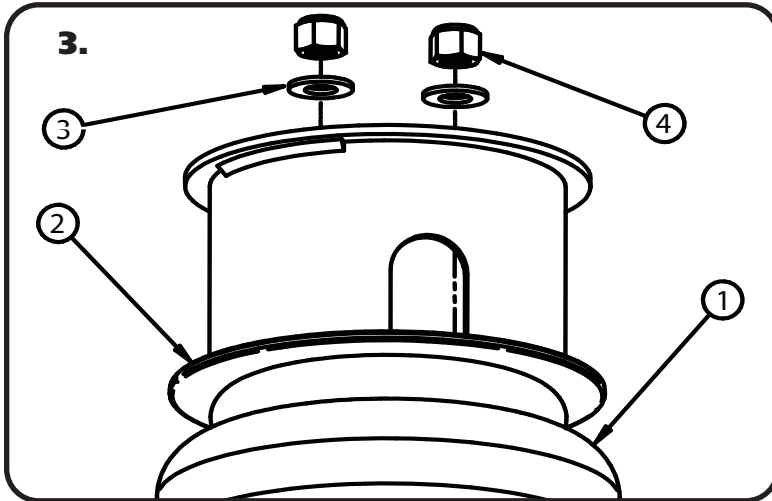
**This CoolRide System is Designed to replace the factory Coil Springs. It should be installed at the same time as the rear shocks, kit # 12270701**

**Refer to the Factory Service Manual for disassembly and Coilspring removal instructions.**

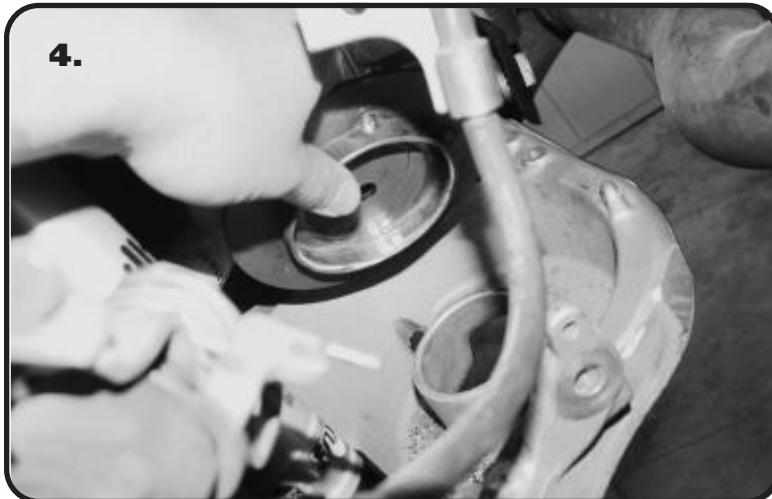
1. Remove the Shocks and the OEM Upper Shock Mount from the Car.
2. Disconnect the Sway Bar Linkage from the Control Arms. These will be reinstalled.



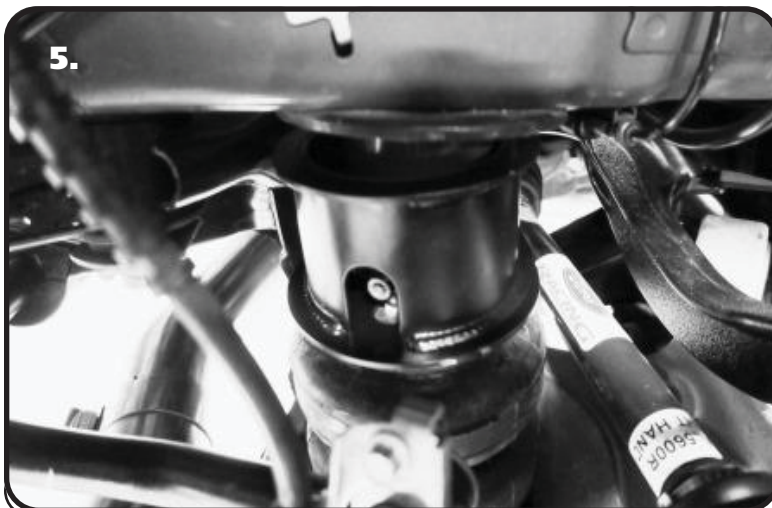
### CoolRide Installation



**3.** Thread a 90 Degree Fitting into the Air Spring with Thread Sealant applied to the threads. Place the Upper Cup Bracket(2) on to the top of the Air Spring(1). Next, install a 3/8" Flat Washer(3) on each threaded stud, followed by a 3/8"-16" Nylok Nut(4). Torque Nuts to 15-20ftlbs.



**4.** Install the Lower Cup Bracket into the OEM coil spring pocket of the control arm. The Cup Bracket is installed with the bottom ring located around the coil spring centering ring on the control arm.

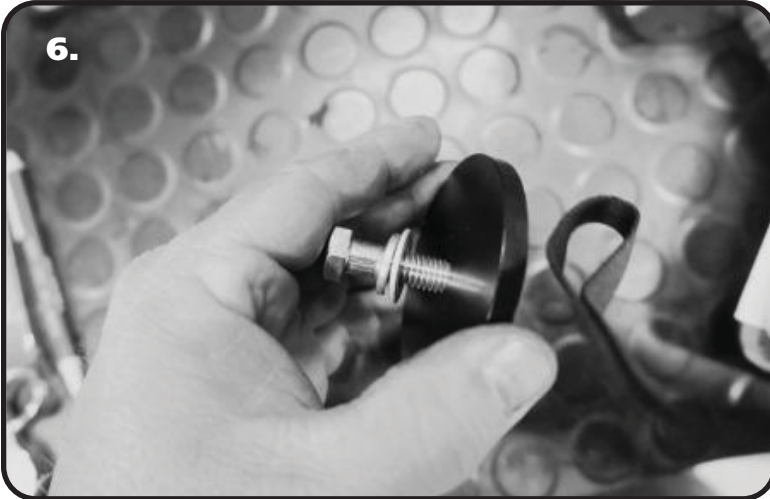


**5.** Install the Air Spring/Upper Cup Assembly into the OEM coil spring location. The top of the Upper Cup will sit in the OEM coil spring location. Clock the fitting to the front of the car, but be sure you have access to it to install the air line. The bottom of the Air Spring will sit on top of the Lower Cup Bracket.



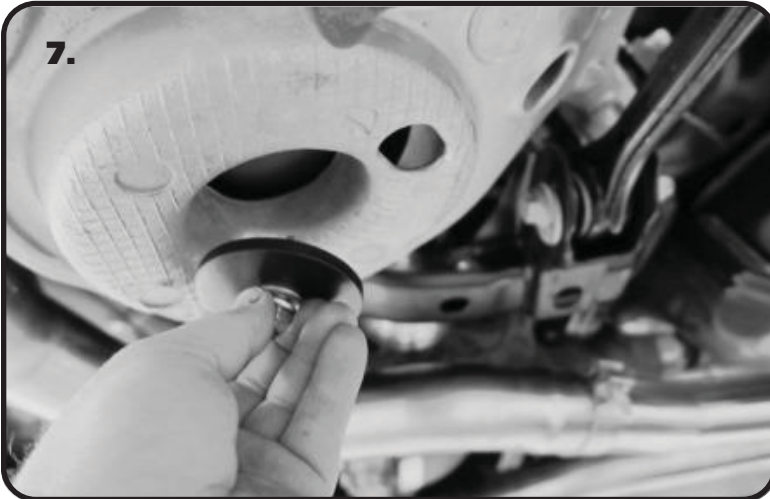
### CoolRide Installation

6.



6. Install a 3/8" Split Lock Washer, followed by a 3/8" Flat Washer, on the 3/8"-16 x 1 1/2" Hex Bolt. Insert the Bolt into the hole in the Clamping Plate.

7.



7. Move the Air Spring around until the threaded hole lines up with the holes in the Lower Cup Bracket. Insert the Clamping Plate into the coil spring centering ring hole in the bottom of the lower control arm, threading the 3/8"-16 Hex Bolt into the bottom of the Air Spring. Hold the Air Spring to keep the fitting hole in the correct location and Torque the 3/8" Hex Bolt to 15-20 ftlbs.

8. Install your HQ Series Shocks and Air Control System before putting the car back on the ground.

### Ride Height

We have designed most cars to have a ride height of about 1 1/2" lower than factory. It will take approximately 80psi to achieve ride height. The air pressure will vary due to driver preference and accessories installed in the vehicle.



### Part # 12270701 - 2015-up Mustang HQ Series Shocks



#### Recommended Tools



## 2015-up Mustang HQ Series Rear Shocks Installation Instructions

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Page	14.....	Shock Installation & Adjustment

**THIS SHOCK KIT WILL NOT FIT THE GT350!!**





### HQ Series Smooth Body Shocks

#### Major Components .....In the box

Part #	Description	QTY
986-10-081	6.65" Stroke Shock	2
70011139	5/8" ID Shock Bushing (Installed in Shock)	2
90002068	Wide Trunnion (Installed in Shock)	2
70012354	Upper Mounting Spacers	4
99372006	3/8"-24 Thin Jam Nut	4
99311022	5/16"-18 x 1 3/4" Hex Bolt	4
99313002	5/16" Flat Washer	8
99312002	5/16"-18 Nylok Nut	4

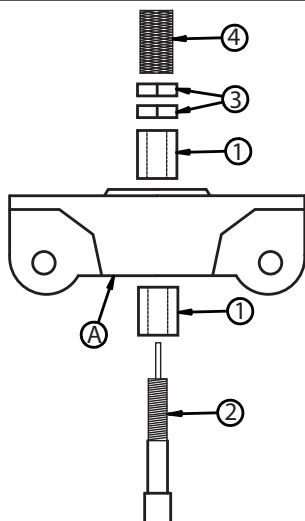
### Shock Installation

This shock kit should be installed at the same time as the rear CoolRide Kit.

Refer to the Factory Service Manual for disassembly and Coilspring removal instructions.

1. Remove the Shocks and the OEM Upper Shock Mount from the Car.
2. Disconnect the Sway Bar Linkage from the Control Arms. These will be reinstalled.

**3.**



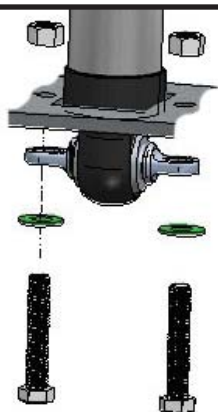
**3.** The HQ Series Shock bolts into the stock location using the OEM upper mount(A). Install an Aluminum Spacer(1) on the Shock Shaft(2). Insert the Shock Shaft into the OEM shock mount. Install a 2nd Aluminum Spacer(1) onto the shock shaft. Thread a 3/8"-24 Lock Nut(3) onto the Shock Shaft and tighten. Install a 2nd 3/8"-24 Lock Nut on the shock shaft and tighten against the 1st lock nut. Install the Adjuster Knob(4). Install the Assembly into the OEM location. Repeat for both sides. Torque the OEM Bolt to 65ftlbs.





### Shock Installation and Adjustment

2.



2. Attach the Trunnion to the OEM Control arm using the supplied Hardware. It may be necessary to rotate the Trunnion to get it in the correct position. This can be done by sticking a screwdriver in one of the slots and spinning the trunnion in the shock bushing. Torque the hardware to 17ftlbs. Do this for both sides. Reattached the sway bar linkage.

The CoolRide kit should already be installed, if not, do it at this time and lower the rear of the car to the ground.

### Shock adjustment 101- Single Adjustable

#### Rebound Adjustment:

How to adjust your new shocks

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet or stud top. You must first begin at the ZERO setting, then set the shock to a street setting of 12 or handling setting of 8.



-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.

-Now turn the rebound adjuster knob counter clockwise 12 clicks. This sets the shock at 12 for a street setting. If you are after a handling setting only go 8 clicks.

#### Take the vehicle for a test drive.



-if you are satisfied with the ride quality, do not do anything, you are set!

-if the vehicle is too soft increase the damping effect by rotating the rebound knob clockwise 3 additional clicks.

-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

#### Note:

One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.