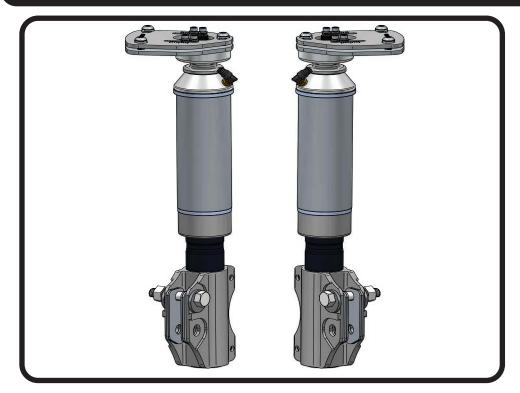




# Part # 12142401 -1994-2004 Mustang



### **Recommended Tools**





# 1994-2004 Mustang Front AirStrut Installation Instructions

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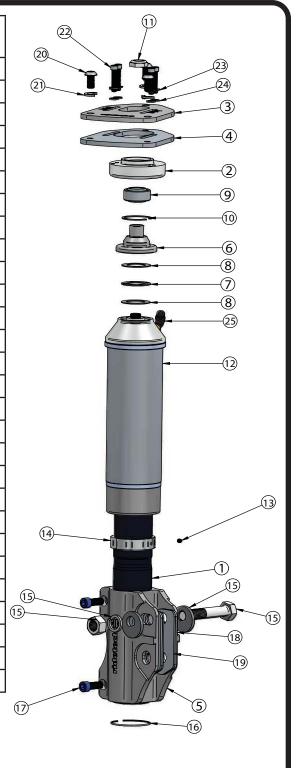






# **Included Components** .....In the box

Item			
#	Part #	Description	QTY
1	986-10-055	Strut Cartridge	2
2	90002470	Bearing Retaining Mount	2
3	70012100	Upper Caster Plate-Driver(Shown)	1
3	70012101	Upper Caster Plate-Pass	1
4	90002469	Lower Caster Plate	2
5	70012068	Strut Extrusion	2
6	90002368	Thrust Bearing Adapter	2
7	70010987	Thrust Bearing	2
8	70010988	Thrust Bearing Washer	4
9	90001042	Upper Mount Bearing	2
10	90000805	Bearing Snap Ring	2
11	99562003	9/16"-18 Nylok Nut	2
12	21090798	Strut Air Spring	2
13	99055000	M5 x.8 x 5mm Set Screw	2
14	234-00-153	Locking Ring	2
15	90000801	Eccentric Bolt	1
16	038-01-035	Strut Retaining Ring	2
17	99371042	3/8"-16 x 1" SHCS	6
18	70012031	Spindle Spacer120" Thick	4
19	70012032	Spindle Spacer097" Thick	4
20	99371029	3/8"-16 x 3/4" BHSC	6
21	99373010	3/8" Split Lock Washer	6
22	99251012	1/4"-20 x 1 1/4" SHCS	8
23	99253009	1/4" Flat Washer	8
24	99253007	1/4" Split Lock Washer	8
25	31954201	1/4" Fitting	2
	90002263	Tube Red Loctite	1
	90002276	Tube Anti-sieze	1



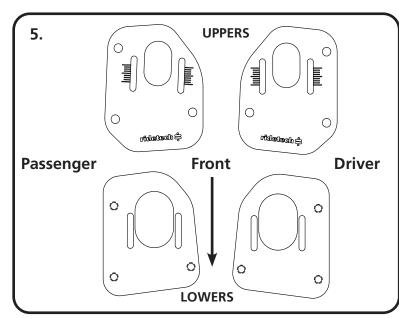


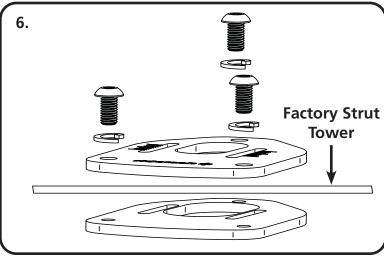


### **Disassembly**

- **1.** This kit will replace the OEM Strut, Coil Spring, and Upper Strut Mount. These items will need to be removed from the car. It will be necessary to disconnect the Swaybar from the Lower Control Arm and remove the Disc Brake Caliper from the spindle, **DO NOT LET THE CALIPER HANG BY THE BRAKE LINE**. Refer to the factory service manual for disassembly procedure...
- **2.** Support the front hub and control arm assembly and remove the (2) struts bolts(retain hardware) that attach the strut to the spindle.
- **3.** Remove the (3) nuts holding the upper strut mount to the car body. **DO NOT REMOVE THE CENTER NUT**.
- **4.** Remove strut assembly from the car.

## **Getting Started**



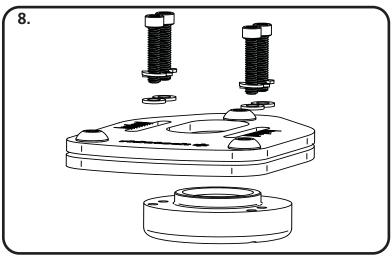


- **5.** The upper strut mount provided in this kit has been designed to provide the ability to get more caster adjustment than the OEM setup. Camber adjustment is done at the spindle mount. The Caster Plate Assembly consists of 2 Plates per side, the Upper Plate is specific to each side. The Lower Steel plate is the same for each side. The Steel Plate is installed on the bottom side of the Strut Tower and the Aluminum Plate is installed on the top of the strut tower. The Aluminum Upper Plate is installed with the Ridetech Logo readable from the front of the car. If the logo is upside down when standing at the front of the car, the plate is installed on the incorrect side.
- **6.** Use Illustration 6 to help you determine the correct position and orientation of the Caster Plates. Position the Steel Plate on the bottom side of the Factory Strut Tower. Lay the Aluminum Upper Plate on top of the Strut Tower aligning the 3 holes with the holes in the Tower. Apply Red Loctite to (3) 3/8" x 3/4" Button Head Bolts. Install a 3/8" Lock Washer on each Bolt and thread one in each hole of the Upper & Plate. Tighten all 3 bolts on each side. The slots in the Upper & Lower Plates should line up.

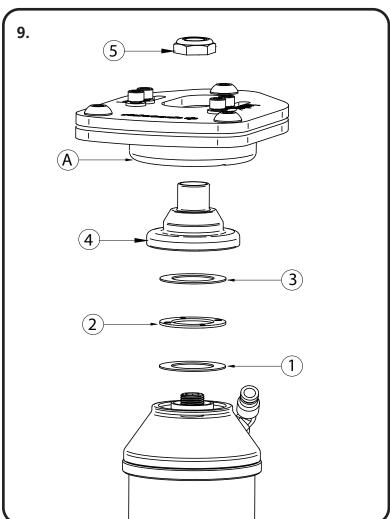




## **Upper Mount Assembly**



**8.** Attach the Bearing Housing to the Caster Plate Assembly. The Housing is positioned with the 4 threaded bolt holes to the front of the car lining 2 holes up with each slot. Insert the housing up from the bottom. Apply Antiseize to the threads of each of the (4) 1/4" x 1 1/4" Socket Head Bolts. Install a 1/4" Lock Washer and Flat Washer on each bolt. The bolts will be inserted through the caster plate with 2 bolts in each slot threading into the Bearing Housing.



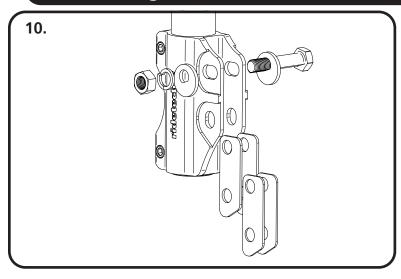
- **9.** Install the Air fitting into the Airspring using thread tape. The Strut comes preassembled, but if for some reason you need to disassemble the strut, Figure 9 shows the assemble order. Remove the Adjuster Knob from the Strut shaft for assembly. Bolt the strut assembly into the upper mount (A), see diagram 9 for assembly order.
- 1. Lower Torrington Bearing Race
- 2. Torrington Bearing
- 3. Upper Torrington Bearing Race
- **4.** Bearing Adapter (Small Diameter Up)
- **5.** 9/16" Locknut

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





### **Assembly**



**10.** Due to various thickness of the spindles, the kit comes with shims for the spindle. It may necessary to run multiple shims of some. If multiple shims are required, install (1) Thick and (1) Thin on each side of the spindle. The lower Strut mounting holes reuses the OEM Bolt. The upper Slotted holes use the 16mm Eccentric Bolt provided in the kit. This Eccentric Bolt is used for camber adjustment.

**NOTE:** Torque Strut Mounting Bolts to 135 ftlbs

- **11.** 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. The Air Spring can be rotated on the Strut to located the fitting. This can be done by grabbing the piston of the Air Spring and rotating it on the Strut body.
- **12.** Repeat previous steps on Passenger side.
- **13.** After both sides are installed, reattached the Sway Bar Linkage and Reinstall the Brake Caliper.
- **14.** It will be necessary to have the car aligned after installing the Ridetech Strut Setup.
- **15.** A good starting point for ride height is going to be approximately 2 1/2" up from fully deflated. To find this, deflate the car and measure from the top of the Wheel Opening to the ground. Inflated the car 2 1/2" up from the deflated measurement. This will be a good starting point but, not set in stone. DO NOT be afraid to try different Ride Heights but, keeping in mind that you do need some compression travel to maintain a good ride quality.





### **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.

#### **STILL HAVE QUESTIONS?**

#### **Tech line hours**

Monday - Friday 8AM - 6PM (EST) ...... 812-482-2932