Part # ATI-3-290-10

CorkSport Performance Adjustable Struts

2014+ Mazda 6

Introducing the CorkSport Performance Adjustable Struts. Designed for the driving enthusiasts that desire quality handling and comfort. The performance struts and shocks feature with 15-position adjustable rebound damping to give you the freedom to tailor the ride quality and handling to your characteristics and suspension setup. Adjusting your performance struts and shocks is a simple and painless process; just simple pop open the hood and/or reach under the wheel well. Let us know your thoughts about the CorkSport Adjustable Struts by submitting a review at: https://corksport.com/mazda-6-adjustable-struts-and-shocks.html

Pre-Installation Notes:

Use extreme caution while working under the vehicle. Use adequate load rated jack and jack stands to support the vehicle on a level surface. Please reference vehicle owners manuals for proper jacking locations.

Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on your car within an hour or two of having driven it, use a fan to cool off the car.

These instructions were written for reference only and the use of a factory service manual is recommended.

How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.

These in car installation photos were produced using a 2014 Mazda 6 sedan. 2014+ Mazda 6 sedan and wagon will be similar.

Materials and Time:

General Info.

Part #: ATI-3-290-10
Time Est: 3-4 hours
Wrench Rating: 3/5

Tooling List

9mm Wrench
10mm Wrench
12mm Wrench
14mm Wrench
17mm Wrench
18mm Wrench
21mm Wrench
23mm Wrench
5mm Allen
6mm Allen
Razor Knife
Small Vise Grips
Hydraulic Jack
Spring Compressor
Flat Heat Screwdriver
21mm Lug Nut Socket
14mm 3/8 or 1/2 Drive Socket
3/8 and 1/2 Ratchet
3/8 and 1/2 Torque Wrench

Parts List

1. One CorkSport Front LH Strut
2. One CorkSport Front RH Strut
3. Two CorkSport Rear Shock

Need Help With Your Installation?
Call (360) 260-CORK

Part # ATI-3-290-10

Order of Operations & Table of Contents

Part # ATI-3-290-10
Detailed Instructions

1. Front Strut Removal

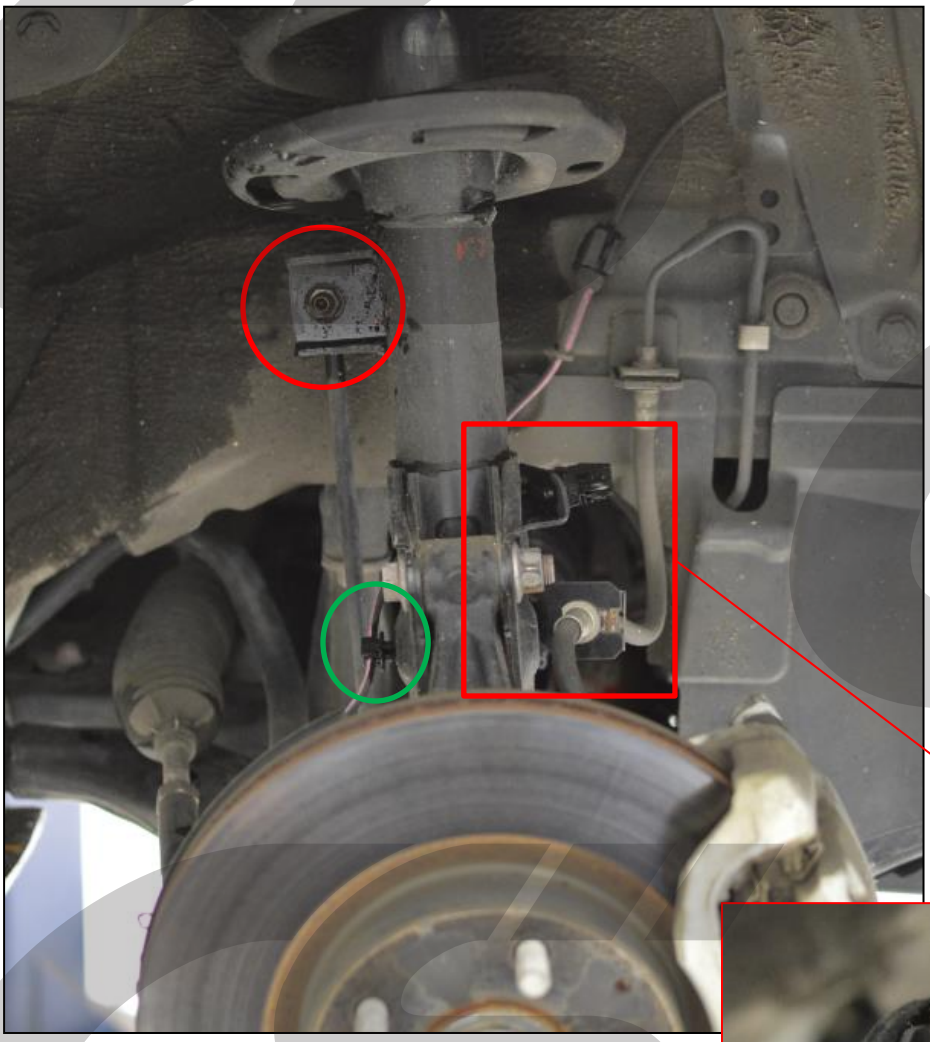


Figure 1a

a) **Position the vehicle on a level surface.**

b) **Raise the vehicle with a hydraulic jack** and support the vehicle with jack stands in the OE recommended locations.

c) **Disconnect the sway bar endlink** with a 14mm wrench and 5mm allen wrench shown with the red circle in Figure 1a.

d) **Remove the ABS sensor wire** shown with the green circle in Figure 1a.

e) **Remove the brake line clip** & brake line as shown in Figure 1b.

f) **Remove the ABS sensor wire** shown with the green circle in Figure 1b.

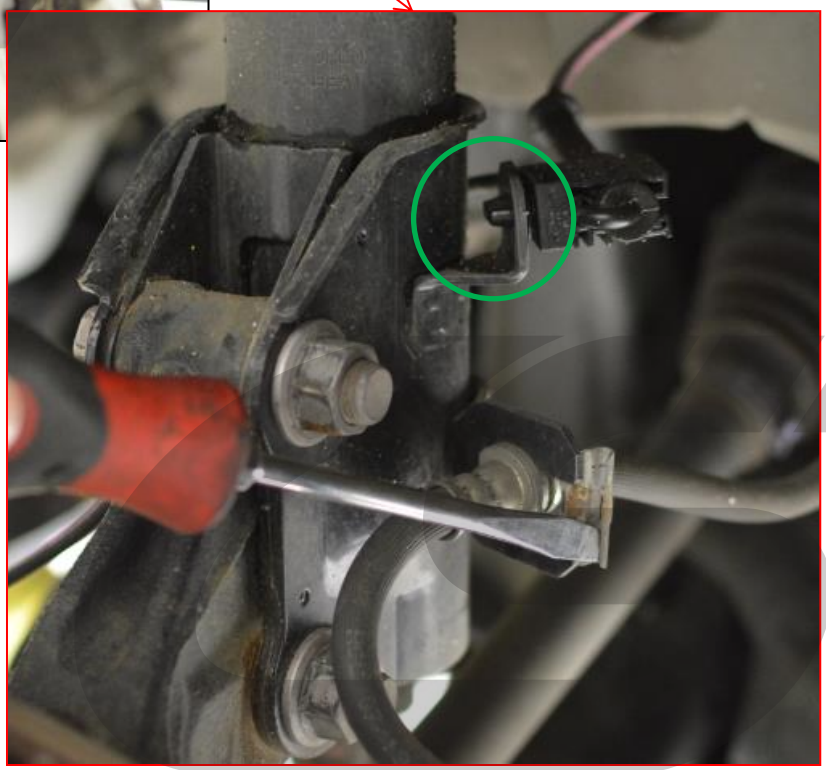


Figure 1b

1. Front Strut Removal (continued)

g) **Remove the suspension upright from the strut.**

h) **Use a 21mm wrench on the bolt head** circled in red in Figure 1c.

i) **Use a 23mm wrench on the bolt nut** circled in green in Figure 1c.

j) **Push the strut towards the engine** as you pull the suspension upright down and out of the strut.

k) **Let the suspension hang**.

l) **Use a 14mm to loosen the three** strut top nuts circled in red in Figure 1d.

m) **Remove two of the nuts** leaving one to hold the strut in the vehicle.

n) **Use one hand to hold the strut through the wheel well** then remove the last nut from the strut top.

o) **Route the strut out of the wheel well.**

Be cautious of the brake line and ABS wire when removing the strut from the vehicle.

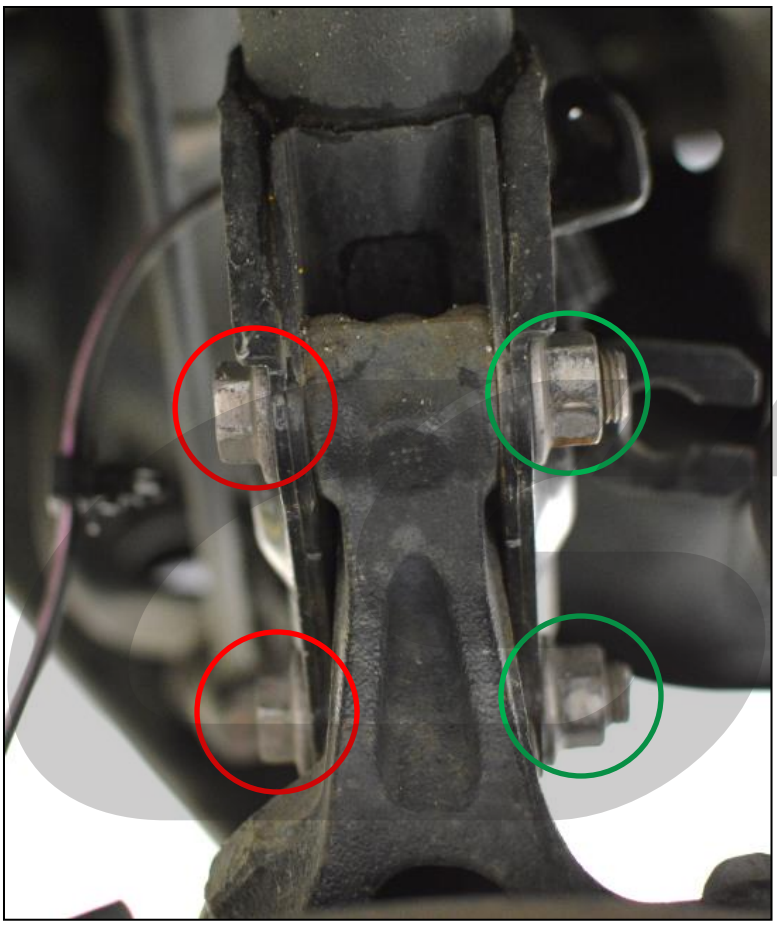


Figure 1c

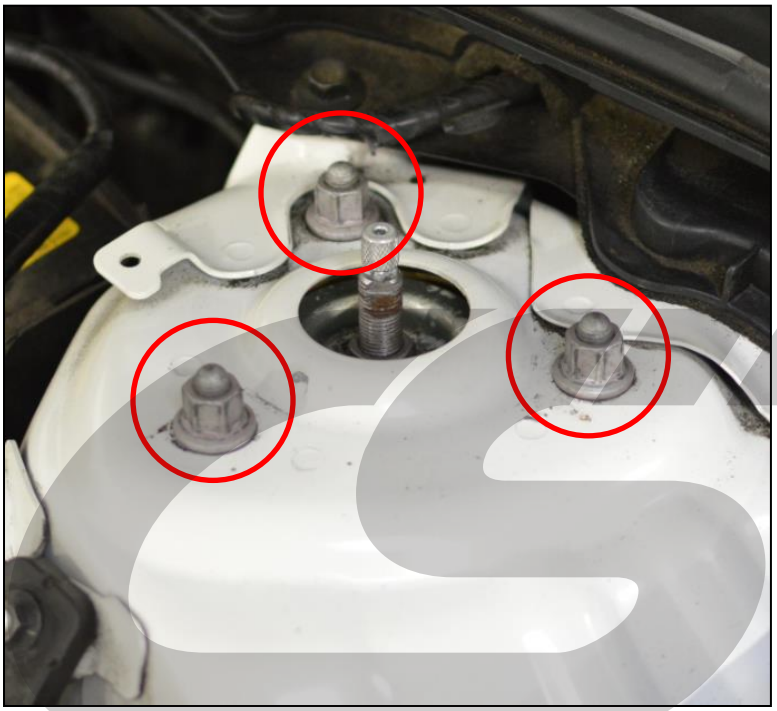


Figure 1d

2. Front Strut Disassembly

Step 2 is not required if you are installing a complete and assembled strut/spring combo.

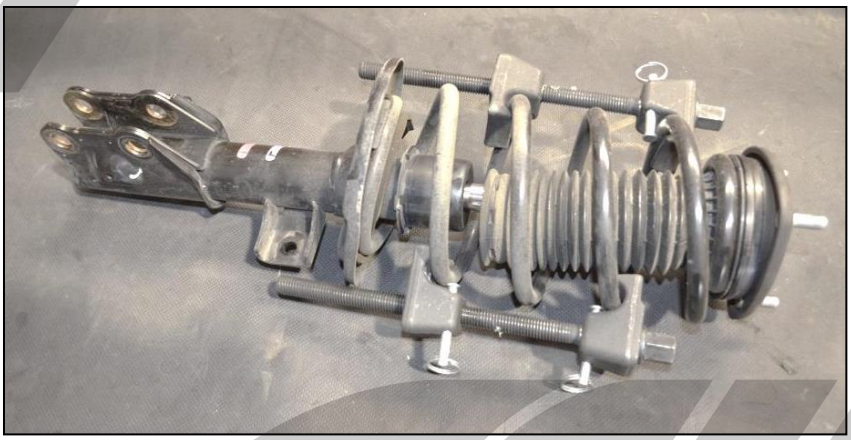


Figure 2a

a) **Use a spring compressor tool** to remove pressure on the strut top. As shown in Figure 2a.

Figure 2b

b) **Remove the strut top** using a 17mm wrench and 6mm allen as shown in Figure 2b.

c) **Disassemble the strut.** Note the order of the components on the strut.
   a) **Top Hat**
   b) **Spring**
   c) **Dust Boot**
   d) **Foam Bump Stop**

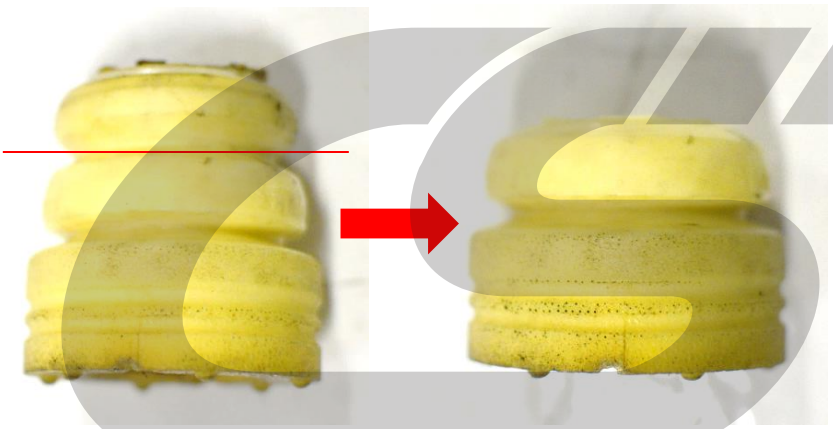


Figure 2c

d) **Use a razor knife to cut** the bump stop at the red line shown in Figure 2c.

3. Front Strut Assembly

Step 3 is not required if you are installing a complete and assembled strut/spring combo.

a) **Use a spring compressor tool** to compress the spring for strut assembly as shown in Figure 2a.

b) **Remove the nut and lock washer** provided on the CorkSport front strut.

c) **Install the OE rubber spring perch** as shown in Figure 3a.

d) **Install the spring** as shown in Figure 3a.

Figure 3a

e) **Install the cut OE bump stop**.

f) **Install the OE dust boot**.

g) **Inspect the OE strut top hat** for damage. Replace if necessary.

h) **Install the OE strut top hat** and thread on the provided lock washer and nut.

i) **Use a 19mm wrench on the nut and 9mm wrench** on the flat spots to tighten the strut top as shown in Figure 3b.

j) Torque the 19mm nut to 41-47 ft.lbs

Figure 3b

4. Front Strut Installation

a) **Repeat Step 1 in reverse order** to re-install the front strut.

b) **Torque Specs:**
   a) Strut Top Nuts = 37-43 ft.lbs
   b) Suspension Upright to Strut = 164-180 ft.lbs
   c) Front Sway Bar Endlink = 34-40 ft.lbs

c) **Repeat Steps 1 – 4 for the other side.**

5. Rear Shock Removal

a) **Use a 14mm wrench and 5mm allen** to remove the sway bar endlink circled in red in Figure 5b.

b) **Use a hydraulic jack at the position** of the red arrow in Figure 5b to support the lower control arm.

c) **Use a 21mm wrench** to remove the nut circled in green in Figure 5b.

d) **Apply a small amount of pressure with the hydraulic jack.**

Figure 5a

e) **Use a 10mm to remove** the nut circled in red in Figure 5a.

f) **Disconnect the arm.**

Figure 5b

5. Rear Shock Removal (continued)

g) **Use a 14mm to remove** the two nuts holding the rear shock top hat. Red circles in Figure 5c.

h) **Pull the sway bar endlink from the lower control arm.**

i) **Lower/pull down the suspension** enough to remove the rear spring.

j) **With the spring removed,** remove the rear shock from the vehicle.

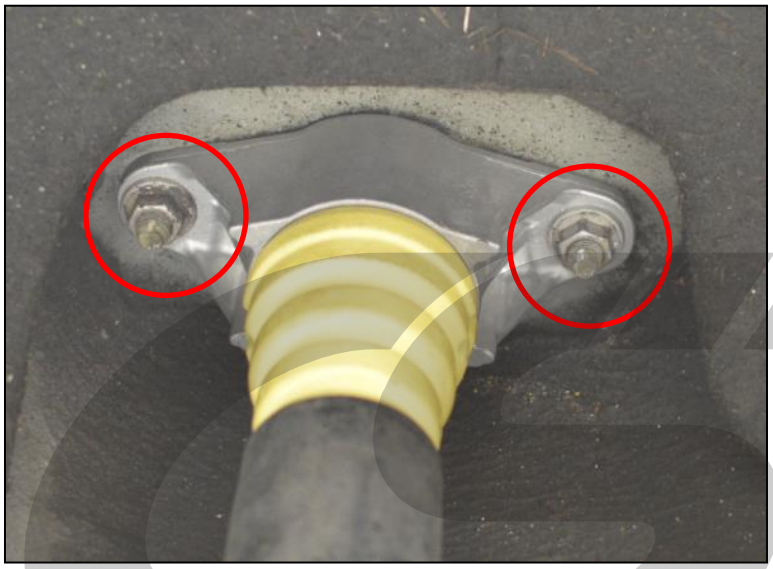


Figure 5c

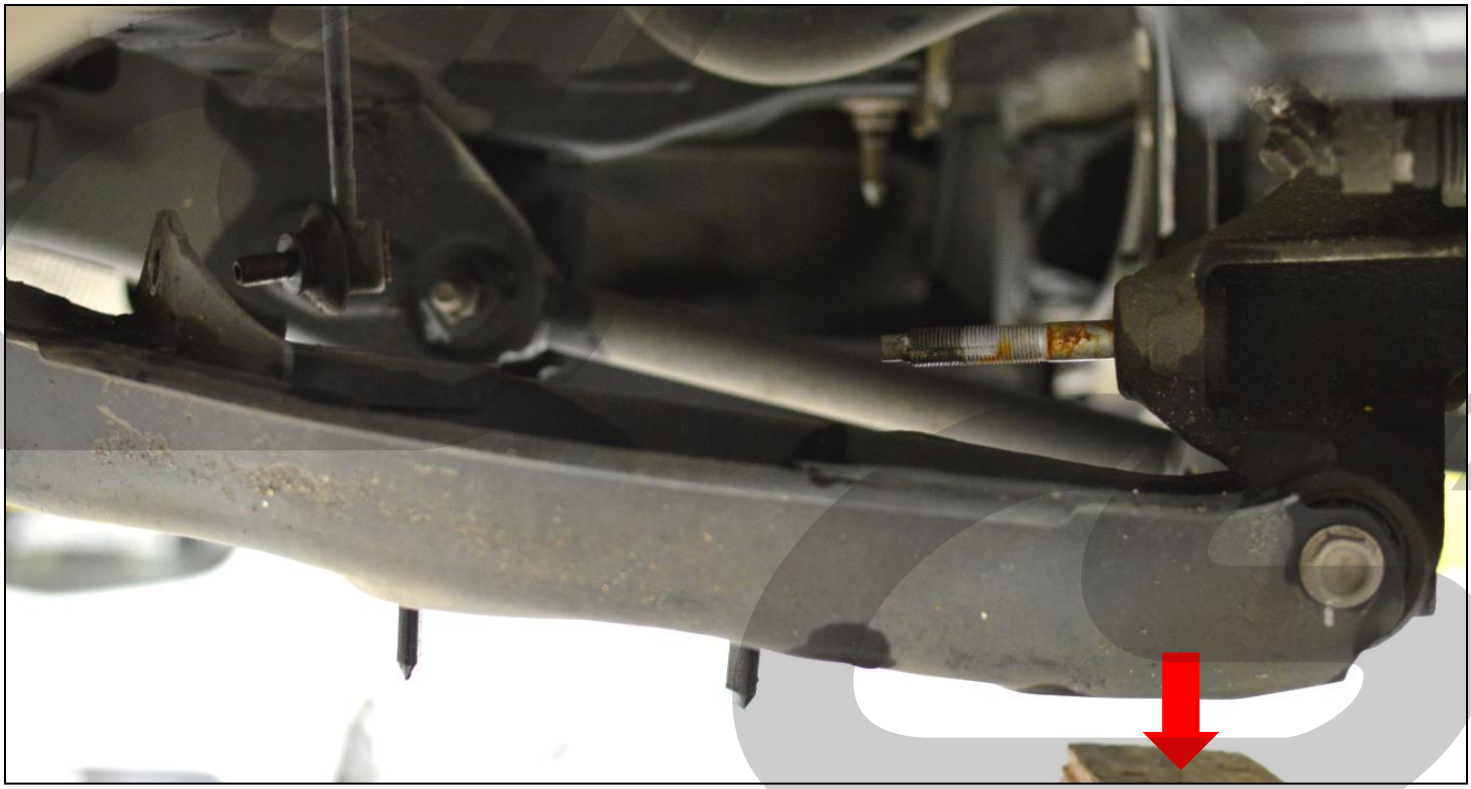


Figure 5d

6. Rear Shock Disassembly/Assembly

a) **Use a 12mm wrench and vise grips** to remove the top hat from the OE rear shock as shown in Figure 6a.

b) **Remove the OE dust boot and bump stop** from the OE top hat as shown in Figure 6b.

c) **Install the OE top hat** onto the CorkSport rear shock with the provided nut.

d) **Use an 18mm wrench to hold the shock and a 12mm wrench on the nut** as shown in Figure 6c.

e) **Tighten the nut until snug** then adjust so the top hat orientation matches Figure 6d.

f) **Torque the nut to 9-12 ft.lbs**

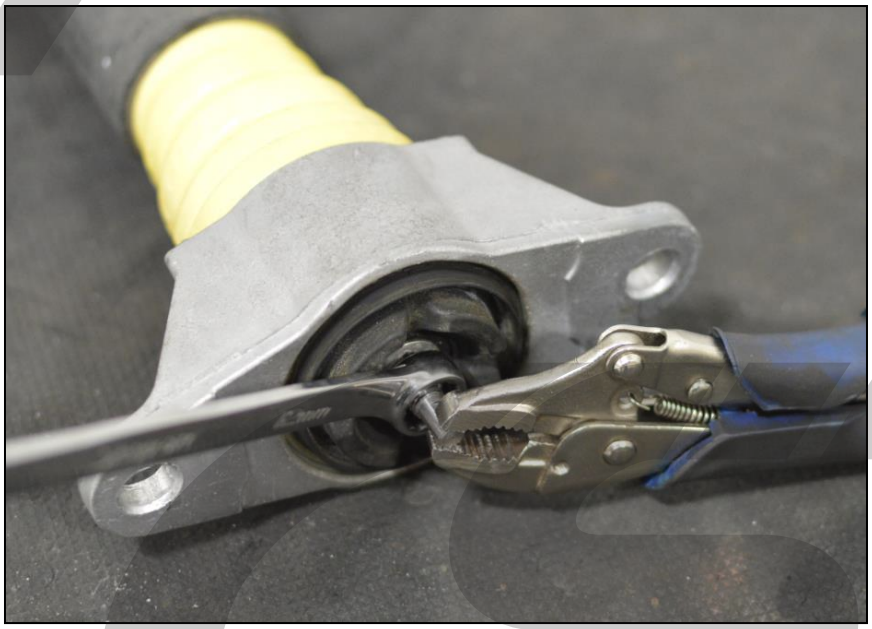


Figure 6a

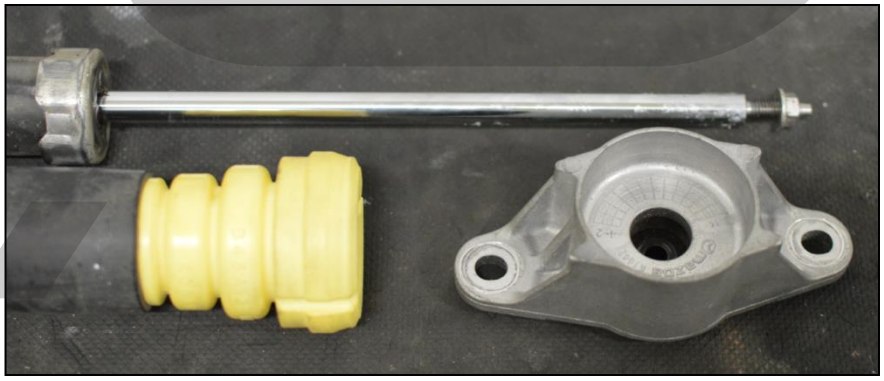


Figure 6b

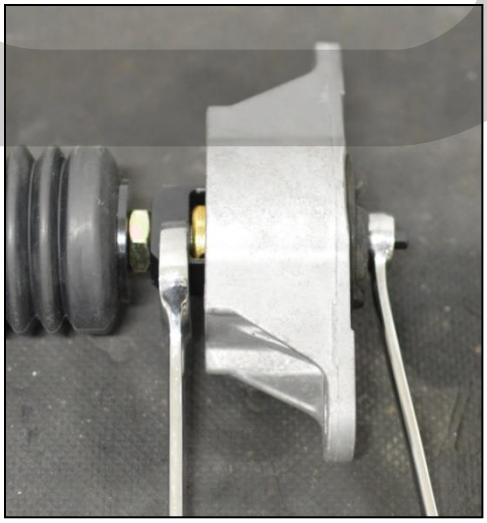


Figure 6c

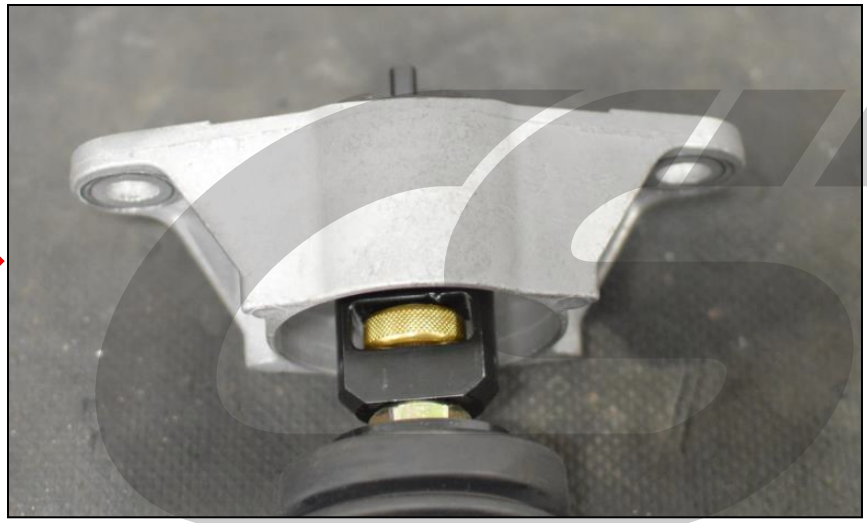


Figure 6d

7. Rear Shock Installation

a) **Repeat Step 5 in reverse order** to re-install the rear shock except step 5e-5f.

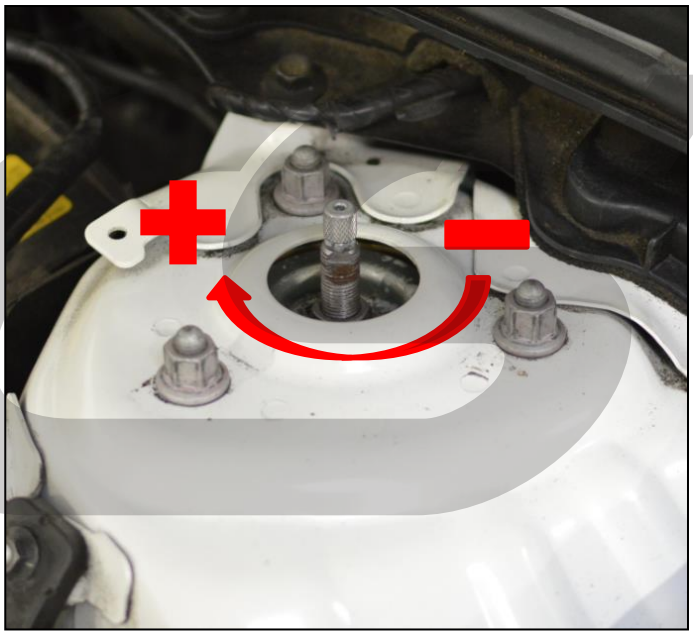
Verify that the spring is correctly seated in the lower control arm and against the chassis.
Rotate the spring clockwise until the spring wire end hits the stop in the lower control arm.
Center the top of the spring on the protrusion in the chassis.

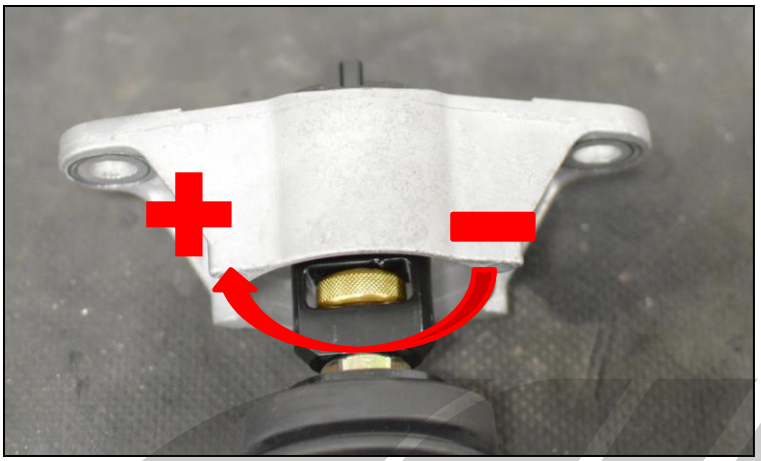
b) **Torque Specs:**

a) Top Hat Nuts =	26-30 ft.lbs
b) 21mm Suspension Upright to Shock =	102-123 ft.lbs
c) Rear Sway Bar Endlink =	34-40 ft.lbs

c) **Repeat Steps 5-7 for the other side.**

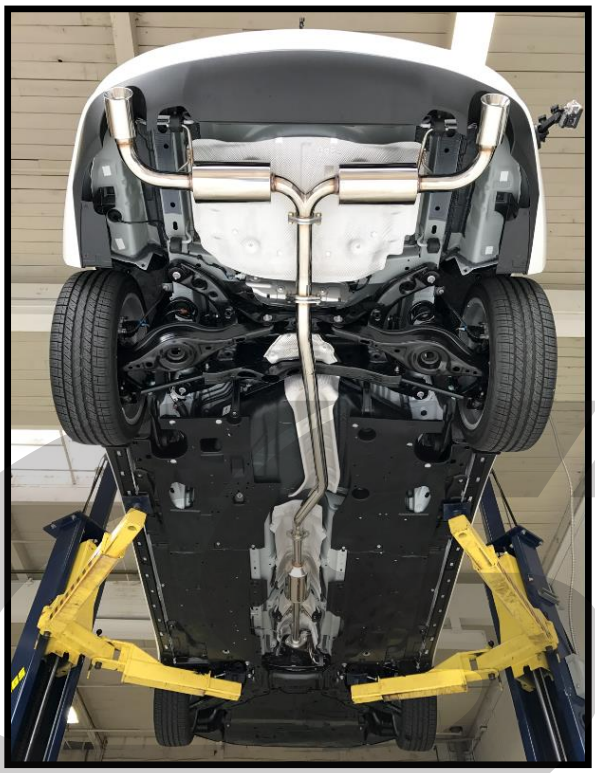
8. Strut/Shock Damping Adjustment





What's Next:

CorkSport Power Series Exhaust



Add style and power to your Mazda 6 with the CorkSport Power Series Exhaust Systems. CorkSport exhaust systems are designed for a factory fitment with high quality materials and manufacturing to provide you with a durable and great looking exhaust system. Whether you are looking for a small increase in power and rumble or something a bit more aggressive, the CorkSport Power Series Exhaust has a style for you.

CorkSport Big Brake Kit

CorkSport Big Brake Kit provides the ultimate in stopping power for your Mazda. Crafted from extremely lightweight billet aluminum, the CorkSport calipers use an opposed piston design that is fixed to provide greatly improved pad wear, and caliper rigidity over the OEM design.

CorkSport Rear Camber Arms

Get your camber back in spec with the CorkSport Adjustable camber arms. Whether you are correcting the added camber from lowering springs or search for the perfect style; the CorkSport rear camber arms will give you the adjustability you need