

## CorkSport Rear Camber Arms

2014+ Mazda 3, 2014+ Mazda 6, & 2013+ CX-5



### This Package should contain:

- 1) Qty 2 CorkSport Rear Camber Arm
- 2) Qty 8 Spherical Bearing Spacer





## **CorkSport Rear Camber Arms**

2014+ Mazda 3, 2014+ Mazda 6, & 2013+ CX-5



Thank you for purchasing the CorkSport Rear 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. We hope you enjoy your new CorkSport Rear Camber Arms and we value your feedback. Submit a review online today at: http://corksport.com/rear-camber-arms-2014-mazda-3-2013-mazda-6.html

## **Pre-Installation Notes:**



**Verify that the car is on a level surface** before proceeding. Use appropriate load rated jack stands to support the vehicle.



**These instructions were written for reference only** and the use of a factory service manual is recommended. Please read these instructions thoroughly prior to starting installation



**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 instructions were written using a 2014 Mazda 3.** 2014+ Mazda 3 & 6 & Mazda CX-5 will be similar.

### Materials and Time:



General Info. Part #: Axm-3-318 Time Est: 3 hours Wrench Rating: 3/5





### Tooling List

1/2" Drive Ratchet 1/2" Drive Breaker Bar 14mm Socket 17mm Socket 17mm Deep Socket 10mm Wrench 24mm Wrench 26mm Wrench 29mm Wrench Flathead Screwdriver



#### **Parts List**

Two (2) CorkSport Rear Camber Arms Eight (8) Spherical Bearing Spacers

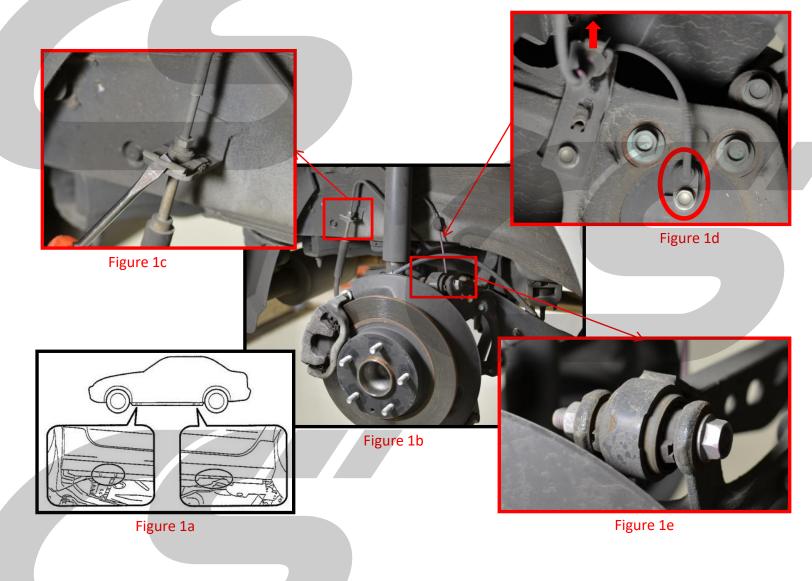
# Part #AXM-3-318 Order of Operations & Table of Contents

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## **Detailed Instructions**







- a) Raise the rear of the vehicle using a hydraulic jack and suspend the vehicle with adequate load rated jackstands in the rear location shown in Figure 1a.
- b) Remove the rear wheels using a 21mm socket and breaker bar.
- c) Remove the brake line retaining clip using as flathead screwdriver as shown in Figure 1c.
- d) Remove the ABS Sensor and wire with a 10mm wrench as shown in Figure 1d. This is located on the backside/inside of the hub.
- e) Loosen the 17mm bolt and nut shown in Figure 1e.



1. Misc Components Disassembly

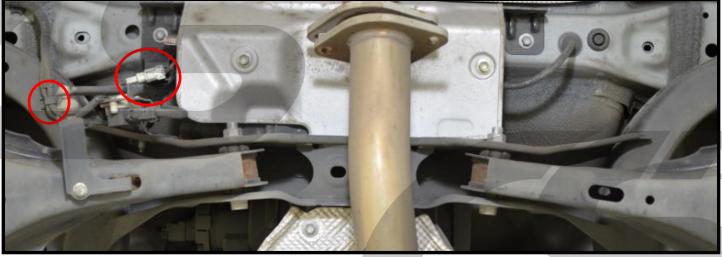


Figure 1f

- f) Disconnect the white electrical connector and wiring zip-tie circled in red in Figure 1f. This will provide slack in the wiring harness to drop the sub-frame.
- g) Disconnect the exhaust muffler section from the exhaust mid-section. 17mm nuts/bolt if you have the CorkSport Axle-Back exhaust or 14mm nuts if you have the OEM muffler section. If you have the CS Axle-Back you can use some small wire to support the exhaust as shown in Figure
  1g. If you have the OEM muffler then it will support itself from the four rubber hangers.
- b) Disconnect both rear swaybar end links from the swaybar. Use a 14mm wrench and 5mm allen wrench to remove the end link. Complete for both sides.

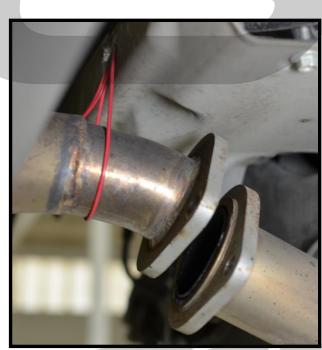


Figure 1g



Figure 1h



2. Sub-Frame & Control Arm Disassembly

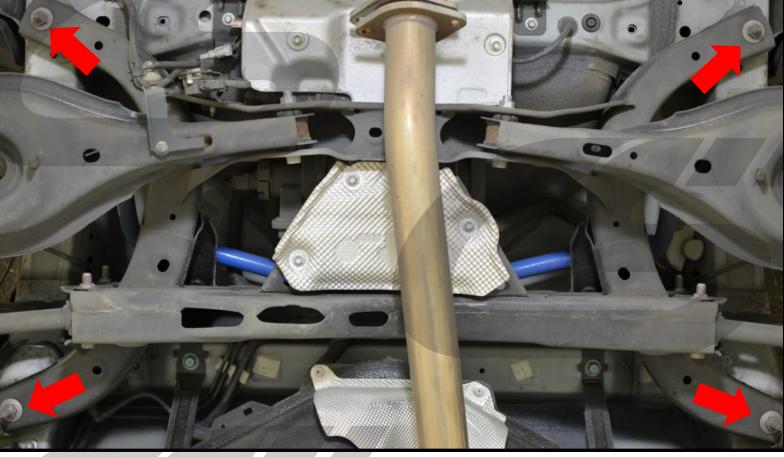


Figure 2a

a) Loosen the four 19mm nuts shown in Figure 2a. Loosen the nuts to the point shown in Figure 2b.



This will allow the sub-frame to drop. Do not be laying under the sub-frame during this step.



Figure 2b

- 2. Sub-Frame & Control Arm Disassembly
- b) Starting with one side of the sub-frame (passenger side shown), support the sub-frame with a sturdy block and hydraulic floor jack in the location of the red dot. Shown in Figure 2c.
- c) Remove the two passenger side 17mm nuts that hold the sub-frame. Shown with the red circle in Figure 2c.
- d) Lower the passenger side of the sub-frame enough to expose the inboard side of the upper control arm. Shown in Figure 2d.
- e) Remove the 17mm bolt holding the inboard side of the upper control arm.



Removing the inboard side bolt of the upper control arm will allow the wheel hub and brake to move freely.



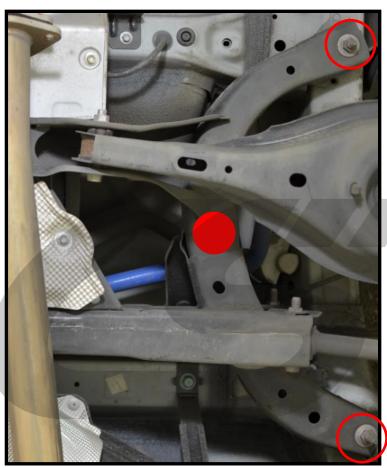


Figure 2c

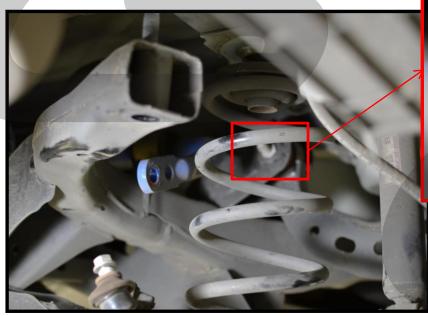




Figure 2d

2. Sub-Frame & Control Arm Disassembly

f) Remove the 17mm bolt and nut then remove the OEM upper control arm. Shown in Figure 2e.





Figure 2e

### 3. CorkSport Camber Arm Installation

a) Reference Figure 3a for inboard and outboard sides of the CorkSport Camber Arm.



**Do not adjust/loosen the camber arm jam nuts or adjustment collar at this point**. The CorkSport Camber Arms come to you fully tightened and set at the same length as OEM. It is recommend to have a professional perform the suspension adjustment.



## **Detailed Instructions**

3. CorkSport Camber Arm Installation

- a) Reference Figure 3a for inboard and outboard sides of the CorkSport Camber Arm.
- b) Install the CorkSport Camber Arm as shown in Figures 3b & 3c.
- c) Note the alignment of the spherical bearing in Figures 3b & 3c vs the alignment in 3d & 3e.
- d) Figures 3d & 3e show INCORRECT alignment. This may cause premature failure and binding during normal suspension movement.
- e) Torque the inboard bolt to 58-77 ft-lbf.
- f) Torque the outboard bolt to 64-77 ft-lbf.
- g) Raise the passenger side of the sub-frame up to reinstall the nuts as shown in Figure 2b on Page 4.
- Repeat steps 2a through 3g for the driver's side.



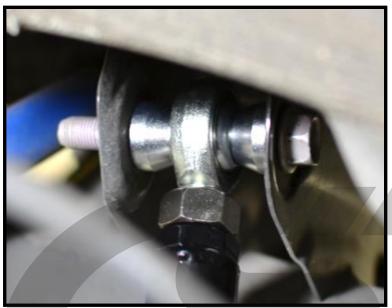


Figure 3b: Correct Alignment



Figure 3c: Correct Alignment



Figure 3d: Incorrect Alignment



Figure 3e: Incorrect Alignment



- 4. Misc Components Assembly
  - a) Raise the sub-frame and torque the four 19mm nuts to 68-81 ft-lbf.
  - b) Reinstall the swaybar end links and torque to 34-40 ft-lbf.
  - c) Reinstall the wires removed in Figure 1f.
  - d) Reinstall the ABS Sensor w/wire and torque to 71-88 in-lbf.
  - e) Reinstall the brake line retaining clip.
  - f) Reinstall wheels and torque to 85-90 ft-lbf in star pattern.

This completes the installation of your CorkSport Rear Camber Arms. It is highly recommended that a professional shop perform any suspension adjustments.

#### 5. CorkSport Camber Arm Adjustment





The CorkSport Camber Arms come to you fully tightened and set at the OEM length. Adjusting: Do not remove the spherical bearing from the vehicle to adjust length. Loosen the 24mm and 29mm Jam nuts on the outboard side. Then rotate the Adjustment Collar (26mm) to the desired length. Verify that the alignment of the spherical bearing is correct. Tighten the 29mm Jam nut against the black camber arm tube. Tighten the 24mm Jam nut against the Adjustment Collar. This completes the adjustment.



### 5. CorkSport Camber Arm Adjustment (continued)



Both the inboard and outboard rod ends have maximum lengths they can be safely extend to. Please review the maximum lengths below, extension past these lengths will void the warranty and may result in camber arm failure.

#### Inboard Rod End Maximum Extension:

The inboard rod end comes pre-assembled at 10mm extension. Extension can be lengthened to 13mm maximum if needed.



Outboard Rod End Maximum Extension:

The outboard rod end comes pre-assembled to match the OEM camber arm. Extension can be lengthened to 35mm maximum if needed.



35mm Max

#### **Outboard Rod End Minimum Extension:**

If you are unable to achieve the negative camber desired with the outboard rod end at minimum length then you shorten the inboard rod end as needed.





### What's Next:

#### **CORKSPORT LED Light Kit**



**Brighten up your interior with the CorkSport LED kit.** CorkSport's LED light kit replaces the incandescent bulbs for the dome lights, vanity visor lights, door lights, and trunk light. The lights are simple to install, with no custom adapters or wiring required.



#### **CORKSPORT Axle Back Exhaust**

Get added power and upgrade the new look of your Mazda with the CorkSport Power Series Axle Back Exhaust. The engineers at CorkSport were given free reign to design an axle back exhaust in the best way fitting to the graceful design. As always, the CorkSport Axle Back Exhaust was built using only the highest quality materials and design.



#### **CORKSPORT SkyActiv Power Series Short Ram Intake**



One of the easiest and most beneficial performance enhancements you can do for your vehicle, the CorkSport Power Series Short Ram Intake replaces your factory airbox with an open intake system allowing more air into the intake chamber. Engineered with exacting tolerances, the CorkSport SkyActiv Short Ram Intake includes our precision machined MAF housing made from billet aluminum, a durable dry flow air filter and custom reinforced silicone connector. In initial testing with the 2.0 Liter SkyActiv engine, the CorkSport Short Ram Intake netted peak gains of +5 HP and +6 lb torque at the wheels.

