

Part # AXM-3-070

CorkSport
MAZDA PERFORMANCE

CorkSport Adjustable Rear Sway bar 2014+ Mazda 3



This package should contain:

- 1. CorkSport Rear Sway Bar
- 2. CorkSport Heavy Duty Sway Bar Brackets
- 3. Bushing Grease
- 4. Polyurethane Bushings



CorkSport Adjustable Rear Sway bar

2014+ Mazda 3



Thank you for purchasing the CorkSport Mazda 3 Rear Sway Bar. Our sway bar will help remove the vehicles tendency to overpower the front tires under hard cornering and minimize traction robbing body lean. The CorkSport Mazda 3 Rear Sway Bar allows you to fine tune the handling. We hope you enjoy your new part! Please let us know your feedback by submitting a review at: <http://www.corksport.com/corksport-2014-mazda-3-rear-sway-bar.html>

Pre-Installation Notes:



Make sure your vehicle is on a level surface prior to starting installation.



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 installation instructions were written using a 2014 Mazda3. Other year Mazda 3 models will be similar.

Materials and Time:



General Info.

Part #: Axm-3-070
Time Est: 1 hour
Wrench Rating: 3/5



Tooling List

3/8 or 1/2" Ratchet
14mm Socket or Box Wrench
17mm Box Wrench
3mm Allen Wrench
5mm Allen Wrench
Torque Wrench
Grease
Jack and Jack Stands



Parts List

One (1) CorkSport Rear Sway Bar
Two (2) 25mm Polyurethane Bushings
Bushing Grease
Four (4) Washers

Need Help With Your Installation?


Call (360) 260-CORK



Order of Operations & Table of Contents

 **Support Car on Jackstands**
Section 1: Jack Vehicle Up

Pg. 2

 **Disassembly and Removal**
Section 2: Remove the Stock Rear Sway Bar

Pg. 2-4

 **Installation and Assembly**
Section 3: Install the CorkSport 2-way adjustable rear sway bar

Pg. 5-7

Detailed Instructions

1. Support Car on Floor Jack/Jackstands or Lift

- a) Use a floor jack and jackstands to gain access to the underside of the vehicle.



Always refer to the floor jack and jack stand manufactures instructions as well as the factory owners manual for your vehicle to determine jacking points and support points. Alternately, use an automotive lift to gain access to the underside of the vehicle.

2. Remove the Stock Rear Sway Bar

- a) Remove the driver's side rear wheel from the vehicle.

- b) Place a jack under the rear control arm and make sure the jack is just slightly lifting the control arm ([Figure 2a](#)).

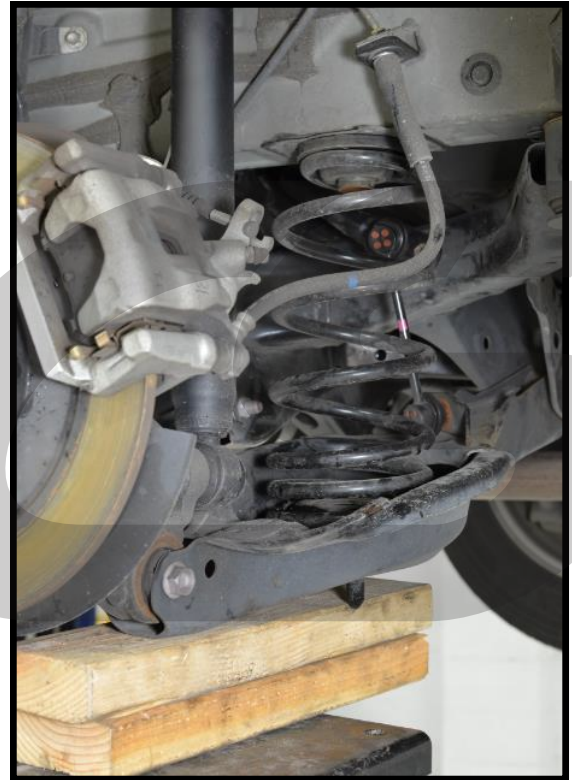


Figure 2a

- c) Remove the rear sway bar end link nut using the 5mm Allen wrench to hold the center of the endlink and a 14mm end wrench to loosen the nut. [Figure 2b](#) shows the driver's side end link and nut location.

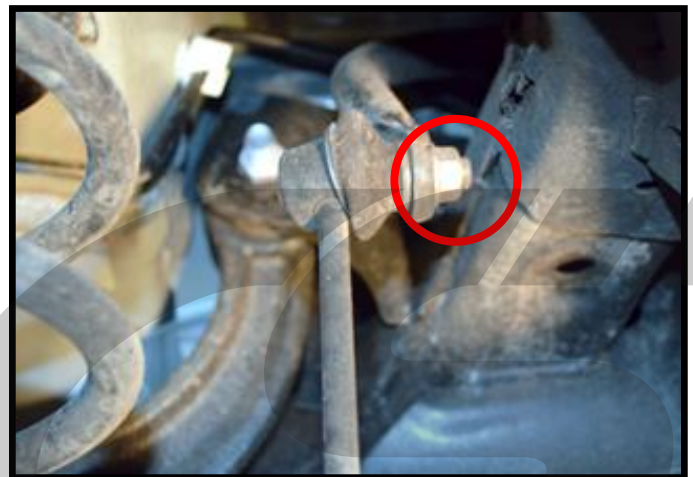


Figure 2b

- d) Repeat step 2c for the other endlink on the passenger's side of the car.

2. Remove the Stock Rear Sway Bar Continued...

- e) **Remove the 17mm bolt that fastens the spindle to the control arm** using a 17mm socket and ratcheting wrench. **Figure 2c** shows the bolt circled in red.



Figure 2c



Be careful when lowering the spindle because the spring can shoot out if you are not supporting the arm with a jack.

- f) **Free control arm from the spindle** (as shown in **Figure 2d**). Lower the control arm using the jack so the spring is slowly uncompressed.



Figure 2d

- g) **Remove the spring** to gain room and slide the swaybar out. **Figure 2e** shows the spring lose it will easily come out. Do not loose the piece on the top of the spring.

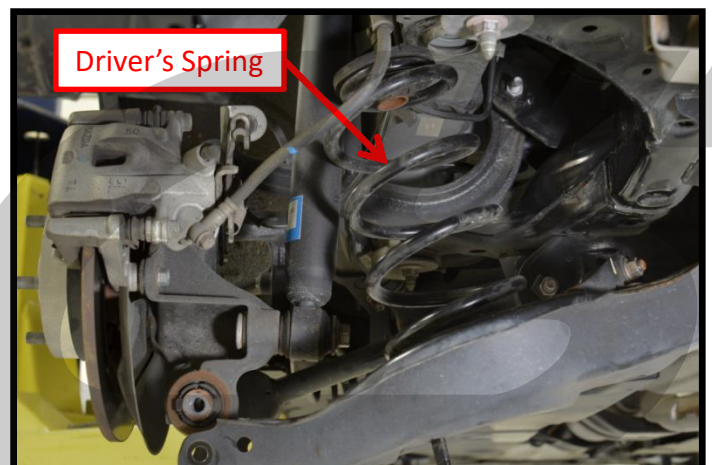


Figure 2e

2. Remove the Stock Rear Sway Bar Continued...

- h) Remove the two (2) swaybar bracket bolts on each of the two brackets using the ratcheting wrench or a 14mm socket (bracket shown in [Figure 2f](#)). Remove the bracket and save the nuts for re-use.

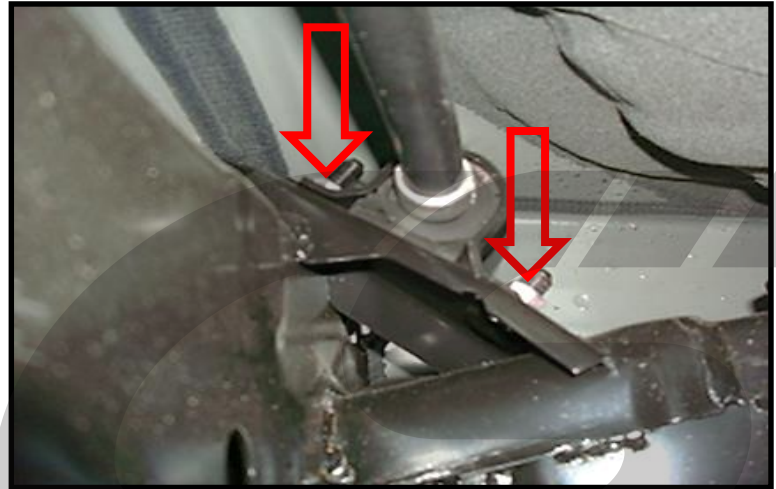


Figure 2f

- i) Slide the swaybar out through the driver's side. Watch out for areas that the bar might hang up on.

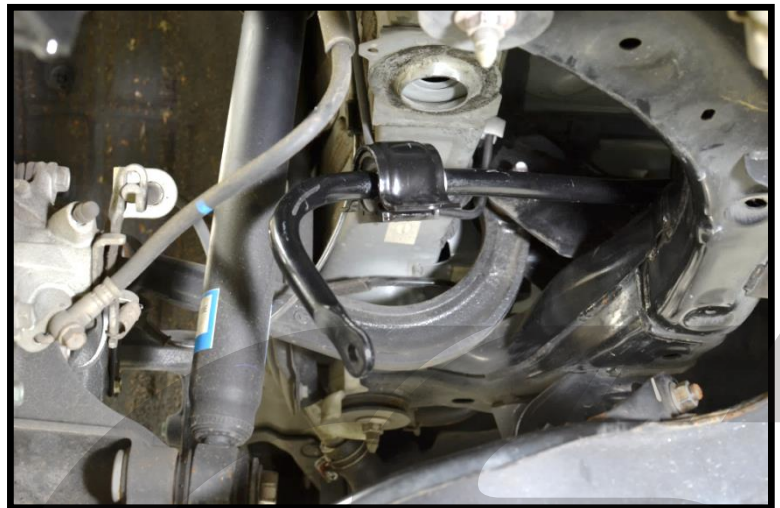


Figure 2g

3. Install the CorkSport 2-way adjustable rear sway bar

- a) **Apply grease around the inside of the bushings.** Make sure to fill the ribs shown in **Figure 3a**.



You may re-grease the bushings after installing if you have a grease gun. This can be easily done on the car with the Zerk fittings. However, please initially grease them before install.

Zerk Fitting

Apply Grease



Figure 3a

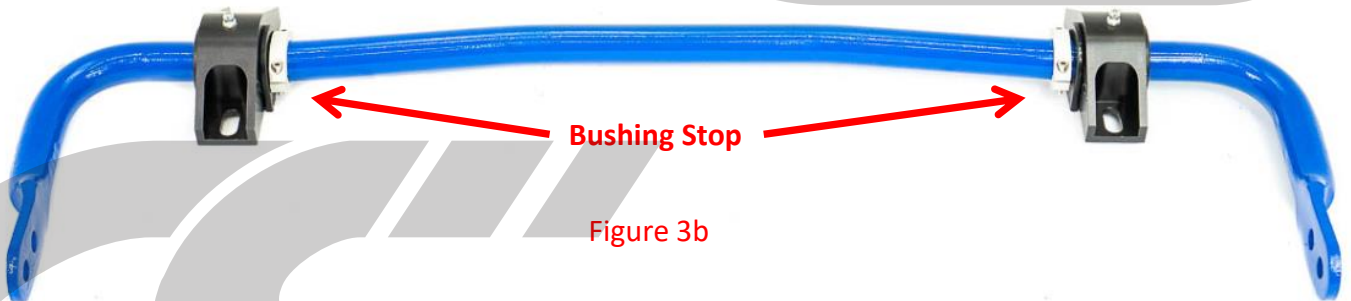


Figure 3b

- b) **Assemble the sway bar brackets on the CorkSport Rear Sway bar.** Refer to **Figure 3b** for final assembly and **Figure 3c** for a detailed picture. Make sure to press the Bushings up against the bushing collar stops.

Swaybar Bushing

Swaybar Bracket

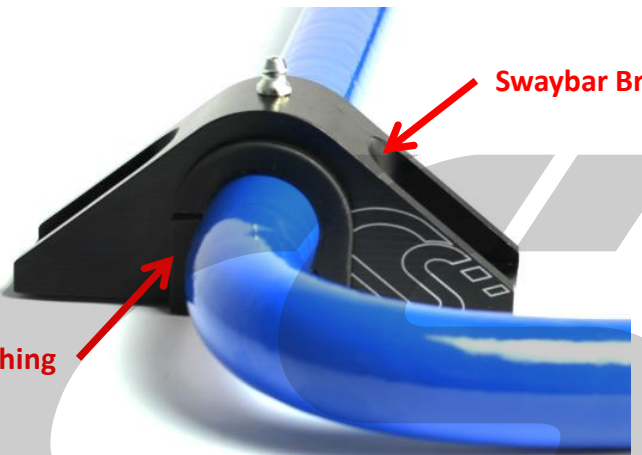


Figure 3c

3. Install the CorkSport 2-way adjustable rear sway bar continued...

- c) **Insert the bar back into the factory position.** Make sure the studs in the sub-frame come through the slots in the brackets. Refer to [Figure 3d](#) for a detailed picture.



If this is difficult, make sure the brackets and bushings are firmly against the bushing stops.

- d) **Loosely install the factory nuts and check that the swaybar is centered.** If needed, adjust the bushing collars to keep the swaybar centered. They can be loosened, repositioned, & retightened with a 3mm Allen wrench.

- e) **Verify the swaybar will not contact suspension components or your subframe during suspension movement.** Due to minor swaybar & vehicle variance, you may need to use the slotted holes in the swaybar brackets to move the tip of the bar away from your subframe slightly. Only ~1/8-1/4" clearance between the tip of the bar and the subframe is required. [Figure 3e](#) shows the direction of movement.

- f) **Reinstall and tighten the four (4) factory 14mm bracket nuts to 25-30ft-lbs.** This torque spec is intentionally higher than the OEM value for added safety.

- g) **Put the factory spring onto the vehicle.** Spin the spring clock wise until the bottom coil is positioned into the lower mount groove (shown with lower perch removed in [Figure 3f](#)).

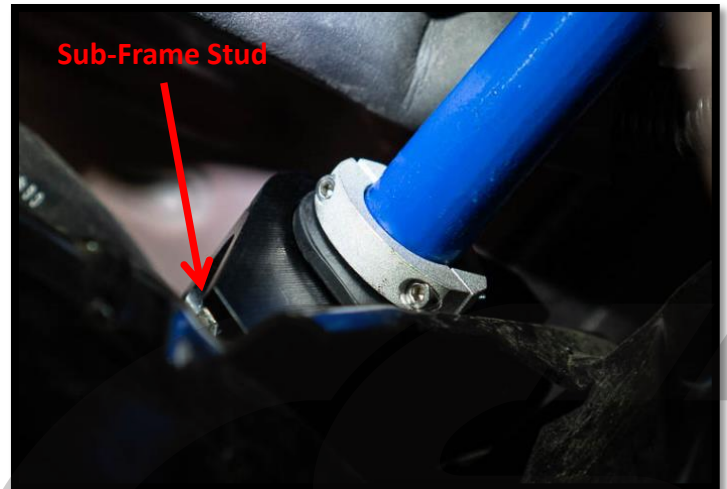


Figure 3d



Figure 3e



Figure 3f

3. Install the CorkSport 2-way adjustable rear sway bar continued...

h) Jack up the lower control arm and reinstall the 17mm bolt removed earlier. Tighten to 64-77ft-lbs. Bolt location shown in **Figure 2c** on page 3 for reference.

i) Reinstall the endlinks (as shown in **Figure 3g**). Tighten to 34-40ft-lbs.

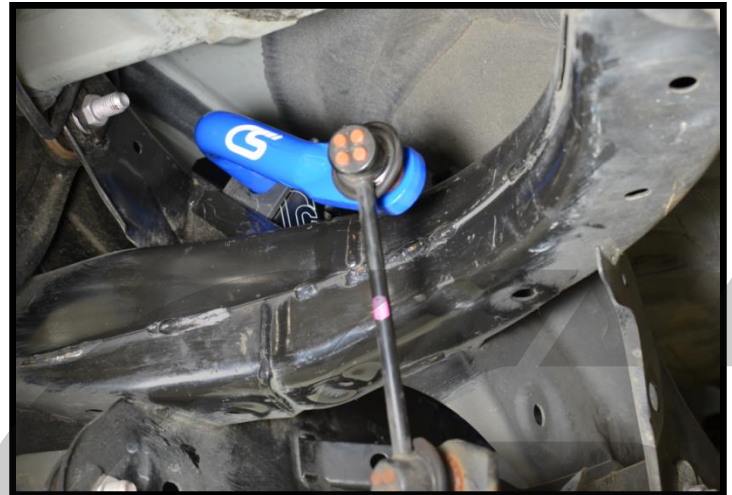


Figure 3g


 Try the endlink in the outermost position first (**red arrow** in **Figure 3h**). If a stiffer setting is desired, move the endlinks to the inner positions.



Figure 3h

j) Reinstall the wheel and lug nuts. Tighten lug nuts to factory specs, we use 85ft-lbs.



This completes the installation of your CorkSport Rear Sway Bar. Take your vehicle for a test drive. Listen for any unusual noise. If anything is heard, make sure that all hardware is properly torqued. Enjoy!

What's Next:

[CORKSPORT 2014+ Mazda 3 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.

[CORKSPORT LED Light Kit for 2014+ Mazda 3](#)

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 2014+ Mazda 3 Axle Back Exhaust](#)



Get added power and upgrade the look of your 2014+ Mazda 3 with the CorkSport Power Series Axle Back Exhaust. As a completely new vehicle the engineers at CorkSport were given free reign to design an axle back exhaust in the best way fitting to the graceful design of the Mazda 3. As always, the CorkSport Axle Back Exhaust was built using only the highest quality materials and design. This means the CorkSport Mazda 3 exhaust is constructed from T-304 stainless steel and is TIG welded with precision laser cut flanges and features full mandrel bending to eliminate any possible flow restrictions.