

# CorkSport Adjustable Rear Sway bar

2014+ Mazda 3



Thank you for purchasing the CorkSport CX5 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 CX5 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-2013-mazda-cx5rear-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 2013 CX-5.** Other year CX-5 models will be similar.

# Materials and Time:



General Info. Part #: CX5-3-070 Time Est: 1 hour Wrench Rating: 3/5



#### **Tooling List** 3/8 or ½" Ratchet

12mm Socket or Box Wrench 14mm Socket or Box Wrench 17mm Box 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

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# Part # CX5-3-070 Order of Operations & Table of Contents

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

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

Pg. 5-7

Pg. 2-4

# Part # CX5-3-070 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 old the center of the endlink and a 12mm end wrench to loosen the nut. Figure 2b shows the driver's side end link and nut location.
- d) Repeat step 2c for the other endlink on the passenger's side of the car.



Figure 2b



### 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.

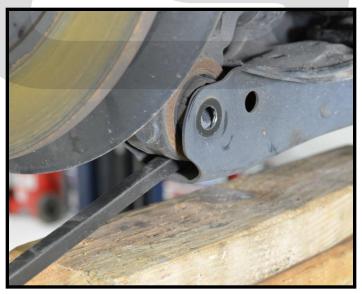


Figure 2d

**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.

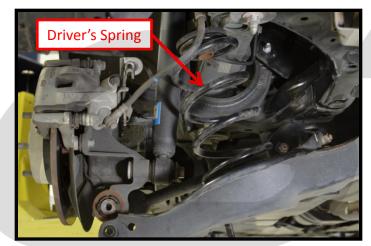


Figure 2e

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- 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.



AWD only: Perform The steps 2i-2k.



FWD only: Skip to Step 2l.

- i) Lower the rear sub frame of the vehicle. Place a floor jack, or transmission jack underneath the rear differential (green arrow in Figure 2g).
- j) Loosen the four (4) 17mm nuts (red circles) fastening the sub frame to the unibody. Do not remove the nuts, just loosen them to the end of their threaded studs (Figure 2g).

Figure 2f

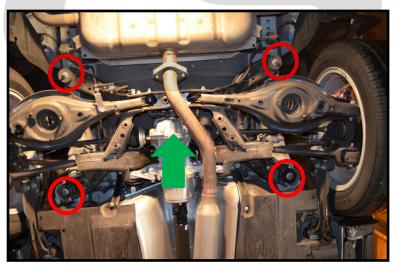


Figure 2g

- k) Lower the subframe with the jack.
- Slide the swaybar out through the driver's side. Watch out for areas that the bar might hang up on (Figure 2h).



Figure 2h

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





- 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.

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

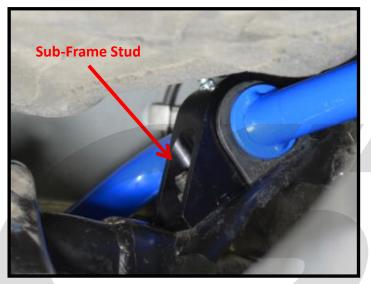


Figure 3d

d) Reinstall and tighten the four (4) factory 14mm bracket nuts to 50ft-lbs.

e) 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 3e).



Figure 3e



- 3. Install the CorkSport 2-way adjustable rear sway bar continued...
  - d) Reinstall the endlinks (as shown in Figure 3f). Tighten to 30ft-lbs.



Figure 3f



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



Figure 3g

e) Reinstall the wheel and lug nuts. Tighten lug nuts to factory specs 70ft-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 2013+ CX-5 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 2013+ CX-5

**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 2013+ Mazda CX5 Axle Back Exhaust



Get added power and upgrade the look of your 2013+ Mazda CX5 with the CorkSport Power Series Axle Back Exhaust. As always, the CorkSport Mazda CX-5 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. The CorkSport CX5 Axle Back Exhaust can be found at our online catalog here:

http://www.corksport.com/corksport-mazda-cx5-axle-backexhaust.html