# **CorkSport Oil Catch Can**



Thank you for purchasing the CorkSport Mazda and Mazdaspeed Oil Catch Can. By adding an Oil Catch Can to your vehicle you will be able to enhance the reliability of your engine and improve performance and fuel economy. The Oil Catch Can will capture unclean crankcase vapors and oil that can contaminate the intake tract allowing for cleaner air entering the engine and less detonation rates. Please let us know your feedback by submitting a review at http://www.corksport.com/corksport-aluminum-oil-catchcan.html

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# **Pre-Installation Notes:**



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. 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 an overview checklist for the more technically advanced users along with step-by-step instructions for customers that require additional detail.



**These installation instructions were written using a 2010 Mazdaspeed 3 with SRI kit installed.** Other year Mazdaspeed3 models will be similar. For other models follow general instructions provided within.

# Materials and Time:



General Info. Part #: Gen-6-889 Time Est: 1-2 hours Wrench Rating: 2/5



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## Parts List

1x Oil Catch Can 1x M6 Nut 2x M6 Bolts 1x Mounting Bracket 4x Zip Ties for Silicone Tubing 2x Hose Clamps 1x Vacuum T 1x Vacuum Cap. 11ft Silicone Tubing 2x Countersunk Screws





- 4. Periodic Maintenance of your CorkSport Oil Catch Can
  - □ The CorkSport Oil Catch Can will need to be emptied periodically. Initially check it at 500 miles. You may see a lot of water collected with the oil. You can quickly view the contents and decide if it needs to be drained by checking the dip stick on the top of the can (500 miles on a test car is shown in Figure 4a).

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- After the first 500 miles, you can check it less frequently. This is easy to do during oil changes since you will have the skid tray off anyway. Simply open the plug at the bottom of the catch can and let the contents drain into an oil pan (first oil change on a test car is shown in Figure 4b).
- □ The frequency that you will have to drain the CorkSport Oil Catch Can will be car specific. Depending on driving habits and modification to your vehicle this may be more or less often. Remember to check the level with the dip stick on a regular basis until you learn how often you will need to drain the can (second oil change on a test car is shown in Figure 4c).

## **Detailed Instructions**

# These instructions are written for Mazdaspeed 3 only. Other applications may vary. Similar applications should review these instructions to determine the best way to route the PCV system. There should be many of the supplies needed for most applications but custom fabrication and additional supplies may be necessary.

#### 1. Removing Factory Under Tray

- a) Jack up and support the vehicle using factory jacking and jack stand points. Refer to the owners manual for correct positions of jack and jack stands
- b) Remove the two plastic screw plugs holding the fender liner to the under tray (green circles Figure 1a).
- c) Remove the ten 10mm hex head bolts from the under tray (red arrows in Figure 1a). FORMANCE
- d) Remove the four 10mm hex head bolts holding the rear of the under tray to the inner fender liner on the driver and passenger sides (see Figure 1b).
- e) Remove Skid Tray.

#### 2. Installing the CorkSport Oil Catch Can

a) To locate the PCV hose while under the car, look up by the dipstick that is located behind the AC compressor. (Figure 2a identifies the hose. The red arrow shows the end that goes into the intake manifold and the green arrow shows the end that goes into the engine).

This is important as we will be hooking hoses up to these in step 3a and 3b.

- b) Release the spring style hose clamps attached to the PCV hose and slide them to the middle of the hose. This can be done using needle nose or snub nose pliers. Remove the hose from the vehicle.
  - The factory PCV value is **located on the block** and is made of plastic. It can be easily broken if care is not taken when removing the factory hose.



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Figure 1a



Figure 1b



Figure 2a

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## 2. Installing the CorkSport Oil Catch Can Continued...

- c) Locate the lower part of the drivers side frame rail. This is where you will mount the oil catch can.
  - •2010+ Mazdaspeed 3: Refer to Figure 2b. There are two unused threaded bolt holes that you will attach the bracket to. Circled in Figure 2b.
  - •2007-2009 Mazdaspeed 3: Refer to Figure 2c. You will need to drill a second hole in the tab located forward of the bolt hole. You will need a 6mm or ¼" drill bit. Attach the bracket to the existing bolt hole and make a mark on the tab in the other bolt hole location in order to drill the hole (the red circle in Figure 2c indicates hole location)
  - •2006-2007 Mazdaspeed6: You can mount the catch can in the same area as the Mazdaspeed3. You will have to adapt the bracket or fabricate a new one.
  - ) Line the two holes in the top of the Catch Can, to the two holes in the circular part of the mounting bracket. The catch can, can be mounted in 60 degree increments. Be sure not to angle the can so that the hoses kink. Ideal bracket orientation for 2010+ Mazdaspeed3 shown in Figure 2d. Be sure the two countersunk screws are wrapped in Teflon Tape.



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Figure 2b









Figure 2d

e) Mount the Oil Catch Can and mounting bracket to the frame of the car using the two supplied M6 bolts. On the 2007-2009 Mazdaspeed3 you will use the provided M6 nut on the bolt hole that was drilled. Ideal mounting location for 2010+ Mazdaspeed3 shown in Figure 2e.

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Figure 2e

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#### 3. Installing the CorkSport Oil Catch Can Silicone Lines Continued...

e) Remove the PCV hose. If you already have a CorkSport Stage II intake you will have the Silicone tube connecting the PCV breather from the turbo inlet pipe to the cam case breather. This can be pulled off easily. If you have the factory PCV hose you will need to disconnect it. You will need to press on either side of the blue clip shown in Figure 3e. Remove the hose at the cam case breather end. (Shown Figure 3f)

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You can also remove the clips using a modified paper clip (shown in Figure 3g) Slide the paper clip in behind the latch clip and remove the entire assembly.

video support on removal of the valve cover breather hose located in knowledgebase



f) Connect the remaining provided silicone tubing to the cam case breather and route it down toward the line that was hooked up earlier in Steps 3b and 3c. Cam Case breather shown in Figure 3f.



The cam case breather is a where the oil comes.

You will be cutting hose in the next step, be sure to keep the hose away from any moving engine components, clutch slave cylinder, shifter cables, etc.

- g) "T" the hose connected in step 3c to the hose connected in step 3f. Use the supplied vacuum T (shown in Figure 3h). Trim the hoses as necessary to prevent kinking and interference with moving parts.
- h) Connect one end of the remaining silicone tubing to the factory vacuum port on the intake elbow or to the CorkSport Stage II Intake port on the turbo inlet pipe.
  (Shown in Figure 3e)



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Figure 3e



Figure 3f



Figure 3h

- 3. Installing the CorkSport Oil Catch Can Continued...
  - i) Route the hose down to the remaining port on the Oil Catch Can. Trim the hoses as necessary to prevent kinking and interference with moving parts. Shown Figure 3c with red arrow. Routing is shown in Figure 3a.

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- j) Zip tie all of the hoses away from moving parts so that they will not bind or kink in the future.
- k) Reinstall the under tray using the steps 1b-1d.
- I) Lower the vehicle back down off the jack stands.
- m) Reinstall the Top Mount Intercooler shroud.

This completes the installation of your CorkSport Oil Catch Can. Please read the periodic maintenance section in Step 4. Check out our <u>knowledgebase</u> for additional install information

#### 4. Periodic Maintenance of your CorkSport Oil Catch Can

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Figure 4c

c) The frequency that you will have to drain the CorkSport Oil Catch Can will be car specific. Depending on driving habits, climate and modification to your vehicle this may be more or less often. Remember to check the level with the dip stick on a regular basis until you learn how often you will need to drain the can (second oil change on a test car is shown in Figure 4c).

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Figure 4a

# What's Next:

#### **CORKSPORT Oil Catch Can Drain Valve Kit**

Get that junk out of your can and move on with your day with the CorkSport Oil Catch Can Drain Valve Kit. With a quick action valve, oil resistant tubing and a brass fitting, you can drain your catch can with a flick of the wrist while keeping your engine bay clean inside and out.

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#### **CORKSPORT Lightweight Lug Nut Set**

**Transform your Mazda or Mazdaspeed wheels with CorkSport Lightweight Extended Lug Nuts.** Meticulously crafted from an extruded aluminum billet and Made from 7075 aluminum, CorkSport utilizes CNC machinery to ensure the highest grade of precision quality during production. The CorkSport brand lug nuts are 12mm x 1.5 pitch thread, ultra lightweight and come in a black finish with CS laser etched logo.

#### **CorkSport Mazdaspeed 3 Lowering Spring Set**



Give your car the performance appearance and edge you have been looking for with the CorkSport Lowering Springs. By reducing ride height approximately 1.2" in the front and 1.0" in the rear, adding the CorkSport Lowering Springs to your Mazdaspeed 3 will result in a quicker turning response, crisper road feel, a more aggressive appearance, and a firmer spring rate, while maintaining excellent ride quality. The CorkSport Mazdaspeed 3 Lowering Springs have an average increased spring rate of 25% and a conical design that trims on top to allow for a full range of adjustment with the CorkSport Camber Plates