

CorkSport Oil Catch Can for SkyActiv 2012-2013 Mazda 3 SkyActiv



Thank you for purchasing the CorkSport Mazda 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. Please let us know your feedback by submitting a review at <http://www.corksport.com/corksport-aluminum-oil-catch-can.html>

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 2013 Mazda 3 SkyActiv. Other year Mazda 3 models will be similar. For other models follow general instructions provided within.

Materials and Time:



General Info.

Part #: Gen-6-889-20
Time Est: 1-2 hours
Wrench Rating: 3/5



Tooling List

10mm Socket
10mm Wrench
Needle nose pliers
Drill and 3/4" drill bit
Scissors or equivalent (for trimming silicone)
Flat Head Screwdriver
1/4" Allen Wrench



Parts List

1x Oil Catch Can
1x Mounting Bracket
2x M6 Bolts
2x 1/4"-20 Countersunk Screws
4x Zip Ties for Silicone Hose
2x Nylon Barbed Reducers
5ft 14mm Silicone Hose
4" 10mm Silicone Hose

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

Checklist

This is an overview of each step in the build. You can use this as a reference and a checklist as you button up the work on your car



These instructions are written for Mazda 3 SkyActiv 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. Remove Factory Under Tray

- a) Use a floor jack and jackstands to gain access to the underside of the vehicle. Support the car on jack stands or car Lift.



Always refer to the floor jack and jack stand manufacturers 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. Redundant support mechanisms are recommended.

- b) Remove the splash tray (Figure 1a).

2. Install the CorkSport Oil Catch Can

- a) Locate the lower part of the drivers side frame rail. This is where you will mount the oil catch can (Figure 2a).
- b) Remove the lower intake resonator. Remove the three (3) 10mm nuts and bolt (circled in red in Figure 2b).
- c) Attach the bracket to the catch can (as shown in Figure 2c) using the supplied ¼"-20 screws.
- d) Remove the two (2) 10mm bolts in the frame rail (red circles in Figure 2d).
- e) Install the catch can (as shown) using the two (2) supplied M6x1.0x20 bolts (Figure 2e).
- f) **OPTIONAL:** Drill a ¾" hole into the fender liner directly below the catch can for drain access (red circle in Figure 2e).

3. Install the CorkSport Oil Catch Can Silicone Hose

- a) Locate the factory PCV hose. It is located above the starter, between the intake manifold and the engine block (Figure 3a).
- b) Pull the hose off the intake manifold as shown (Figure 3b).
- c) Connect the OCC hoses as shown in the diagram on page 3. Use the supplied hose reducers as shown (Figure 3c).

3. Install the CorkSport Oil Catch Can Silicone Hose (continued)

- d) Fit the smaller supplied hose with a barbed reducer onto the intake manifold (green arrow in Figure 3d).
- e) Place the other supplied barbed reducer into the factory PCV hose (red arrow in Figure 3d).
- f) Attach the larger supplied hose to the barbed reducers.
- g) Route the hose over the transmission and behind the wiring harness (as shown in Figure 3d).
- h) Trim the hose leaving enough slack to account for engine movement and attach to the catch can (Figure 3c).
- i) Zip tie all of the hoses away from moving parts so that they will not bind or kink in the future.
- j) Reinstall the under tray using the steps in 1b.
- k) Lower the vehicle back down off the jack stands.

4. Checking the Catch Can Fluid Level

- a) **With aftermarket intake:** Open the hood and reach down behind the drivers headlight and remove the catch can dipstick (green arrow in Figure 4a).
- b) **With factory air box:** Remove the splash tray. Reach up and remove the catch can dipstick (red arrow in Figure 4a).



This completes the installation of your CorkSport Oil Catch Can. Please read the periodic maintenance section in Step 5. Check out our [knowledgebase](#) for additional install information

Detailed Instructions

 These instructions are made for 2010-2013 Mazda 3 SkyActiv.

1. Remove Factory Under Tray

- a) Use a floor jack and jackstands to gain access to the underside of the vehicle. Support the car on jack stands or car lift.



Always refer to the floor jack and jack stand manufacturers 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. Redundant support mechanisms are recommended.

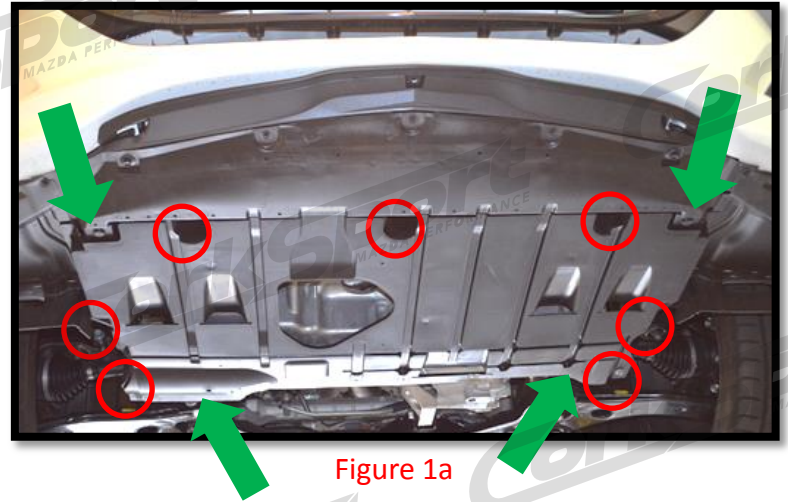


Figure 1a

- b) Remove the splash tray. Use a 10mm socket wrench to remove the seven (7) bolts (red circles) and pry out the two (2) push clips with a flat blade screw driver (green arrows in Figure 1a).

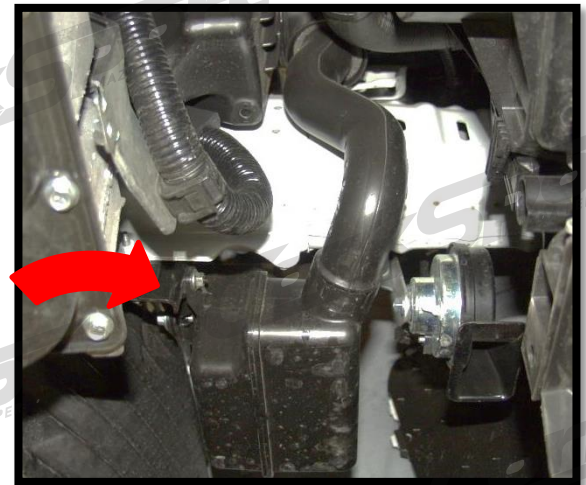


Figure 2a

2. Install the CorkSport Oil Catch Can

- a) Locate the lower part of the drivers side frame rail. This is where you will mount the oil catch can (Figure 2a).

- b) Remove the lower intake resonator. Remove the three (3) 10mm nuts and bolt (red circle in Figure 2b).



Intake Resonator

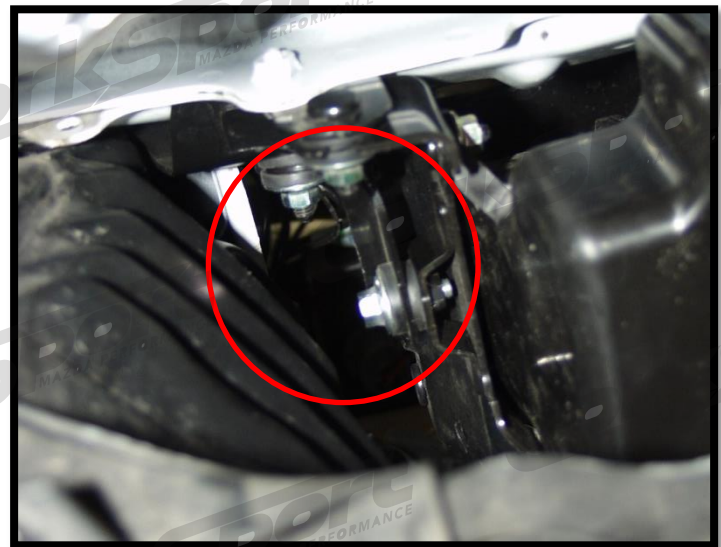


Figure 2b

2. Install the CorkSport Oil Catch Can (continued)

- c) **Attach the bracket to the catch can** (as shown in **Figure 2c**) using the supplied ¼-20 counter-sunk screws.

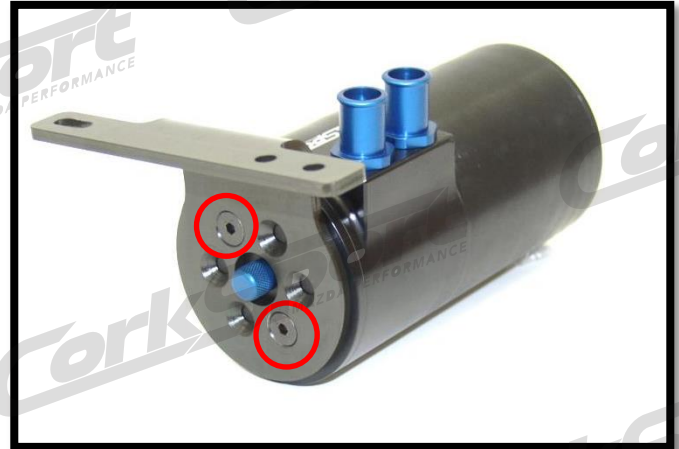


Figure 2c

- d) **Remove the two (2) 10mm bolts** in the frame rail (**red circles** in **Figure 2d**).

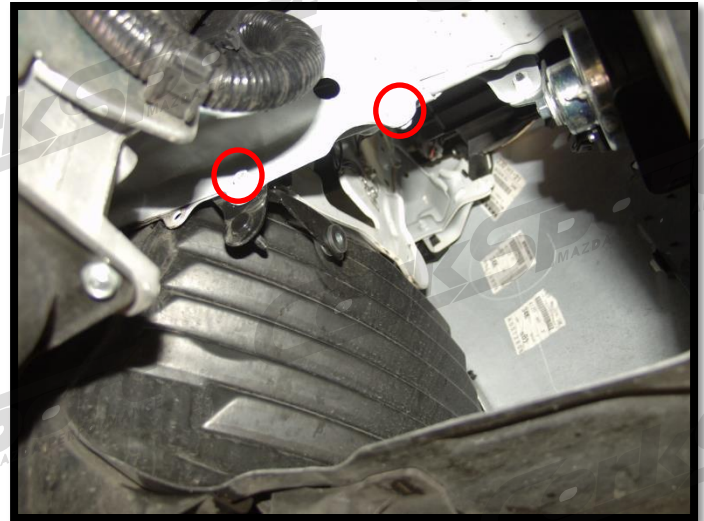


Figure 2d

- e) **Install the catch can** (as shown) using the two (2) supplied M6x1.0x20 bolts (**red arrows** in **Figure 2e**).

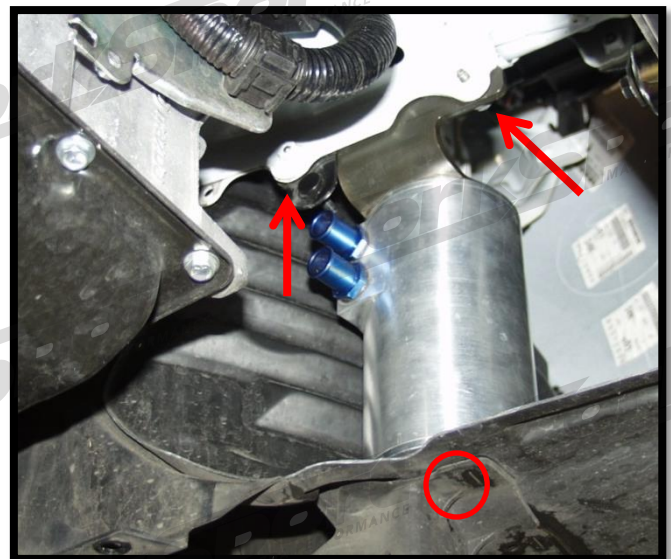


Figure 2e

- f) **OPTIONAL: Drill a ¼" hole** into the fender liner directly below the catch can for drain access (**red circle** in **Figure 2e**).

3. Install the CorkSport Oil Catch Can Silicone Hose

a) Locate the factory PCV hose. It is located above the starter, between the intake manifold and the engine block (Red arrow in Figure 3a).

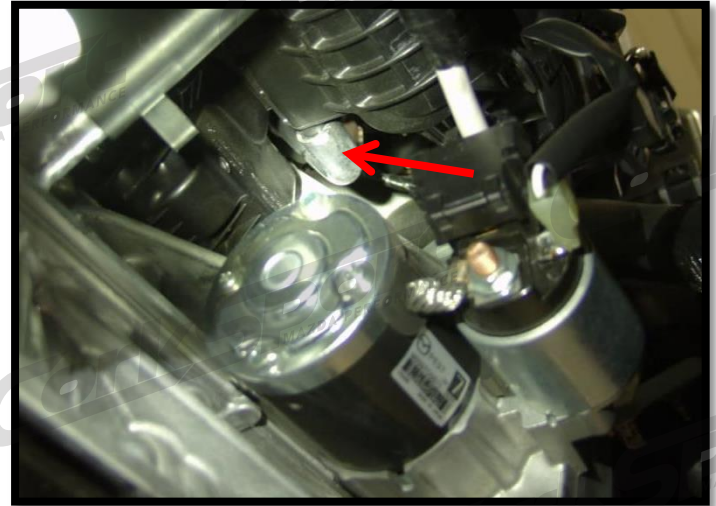


Figure 3a

b) Pull the hose off the intake manifold as shown (Figure 3b).

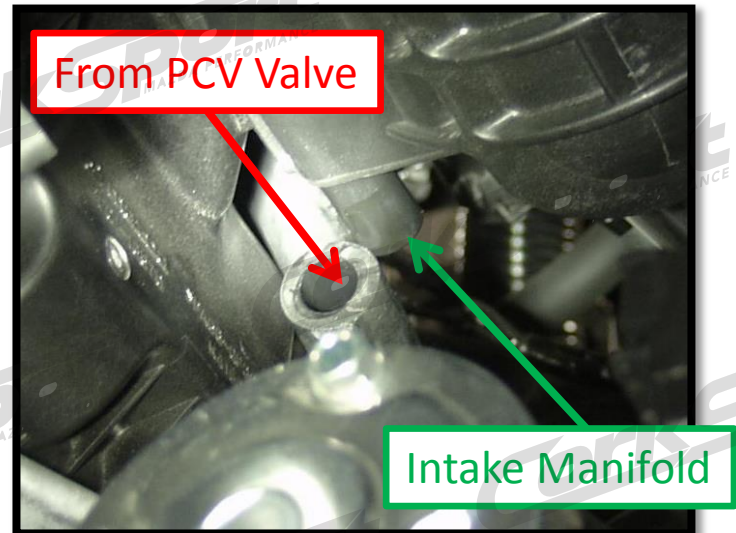


Figure 3b

c) Review the diagram for the OCC hoses as shown. Use the supplied hose reducers as shown (blue arrows in Figure 3c). The next pages will detail these connections.

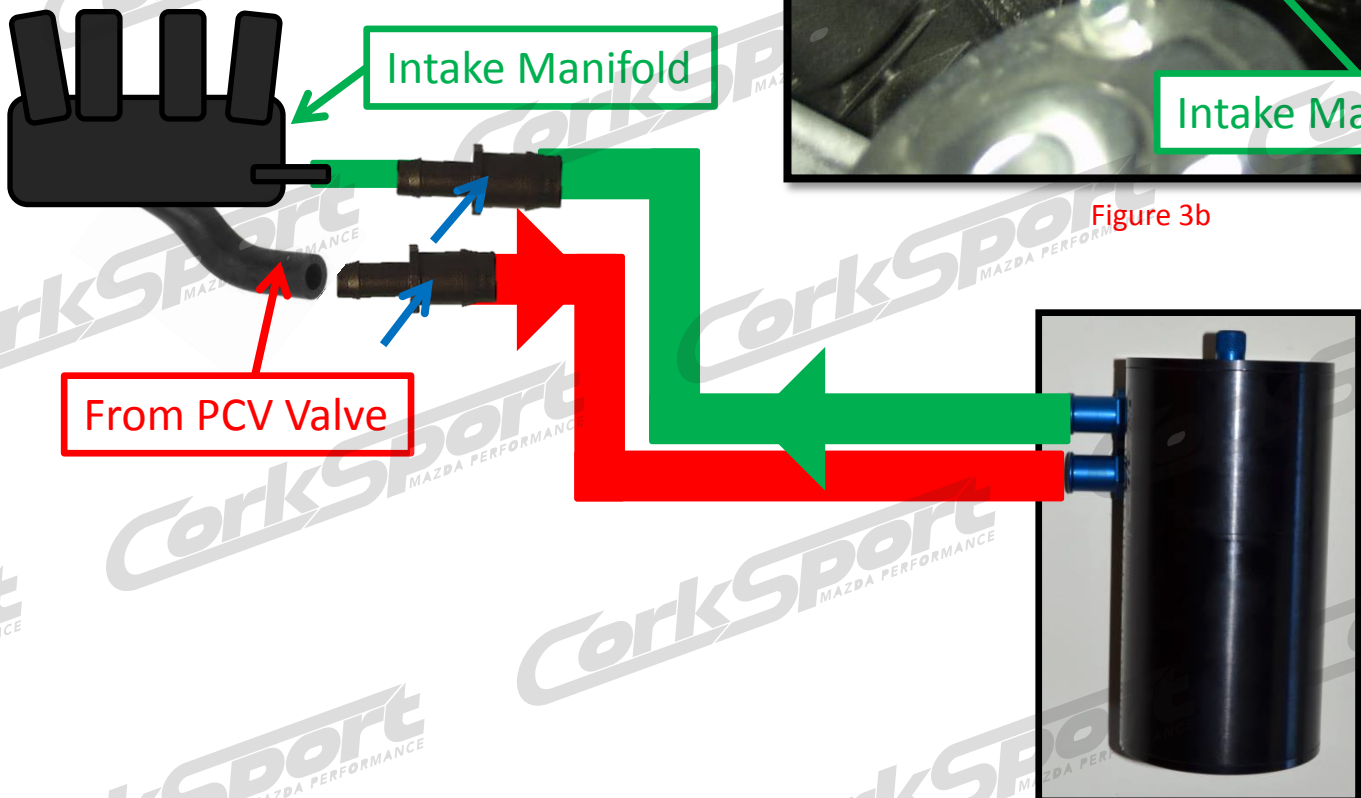


Figure 3c

3. Install the CorkSport Oil Catch Can Silicone Hose (continued)

d) Fit the smaller 4" 10mm supplied hose with a barbed reducer onto the intake manifold (green arrow in Figure 3d). Reducers shown in white color for easier viewing.

e) Place the other supplied barbed reducer into the factory PCV hose (red arrow in Figure 3d). Reducers shown in white color for easier viewing.

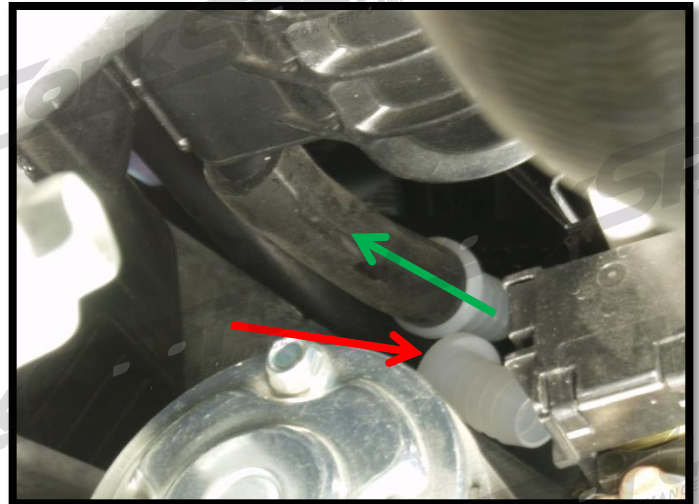


Figure 3d

f) Attach the larger supplied hose to the barbed reducers.

g) Route the 5' of reinforced hose over the transmission and behind the wiring harness (as shown in Figure 3e).

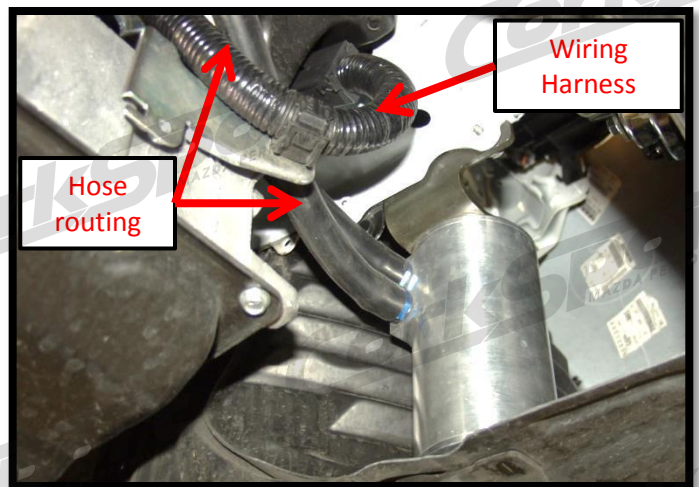


Figure 3e

h) Trim the hose with scissors or similar leaving enough slack to account for engine movement and attach to the catch can (Figure 3e).

3. Install the CorkSport Oil Catch Can Silicone Hose (continued)

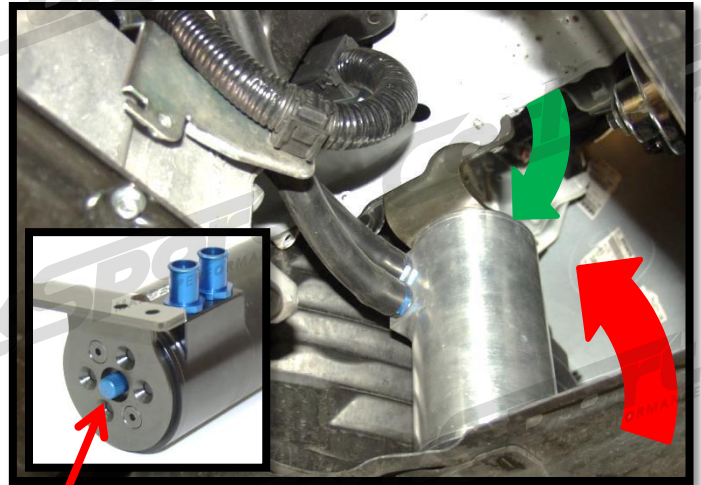
- i) Zip tie all of the hoses away from moving parts so that they will not bind or kink in the future.
- j) Reinstall the under tray using the steps in **1b**.
- k) Lower the vehicle back down off the jack stands.
- l) If installing the optional drain valve, now would be good time to complete the included instructions.



This completes the installation of your CorkSport Oil Catch Can. Please read the periodic maintenance section in Step 5

4. Checking the Catch Can Fluid Level

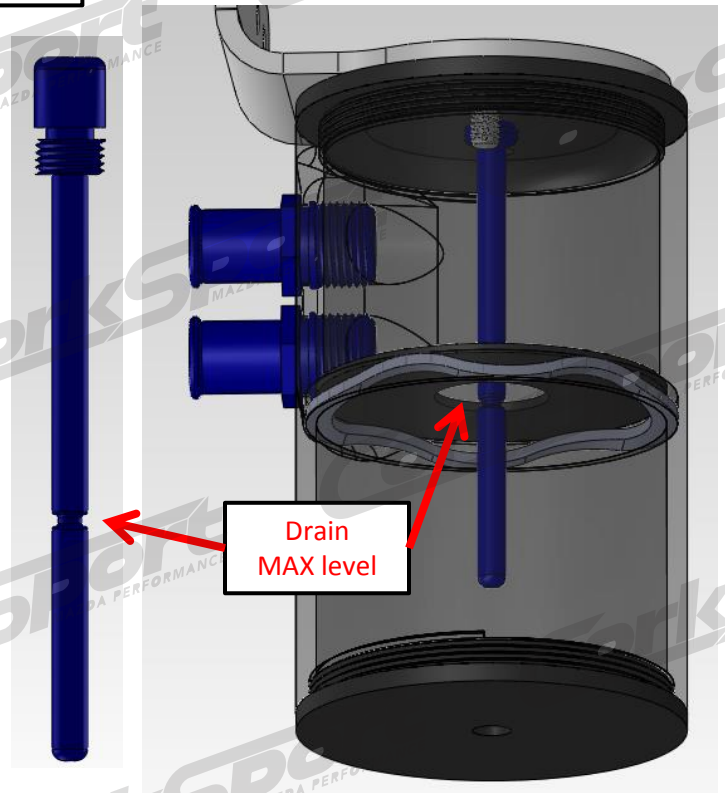
- a) **With aftermarket intake:** Open the hood and reach down behind the drivers headlight and remove the catch can dipstick (green arrow in Figure 4a). DO NOT ALLOW THE FLUID TO GO OVER THE MAX LEVEL (shown in Figure 4b).



Dipstick

Figure 4a

- b) **With factory air box:** Remove the splash tray. Reach up and remove the catch can dipstick (red arrow in Figure 4a). DO NOT ALLOW THE FLUID TO GO OVER THE MAX LEVEL (shown in Figure 4b).

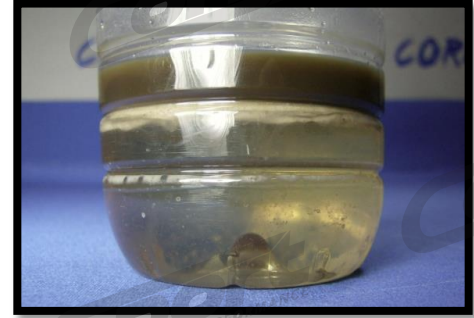


Drain
MAX level

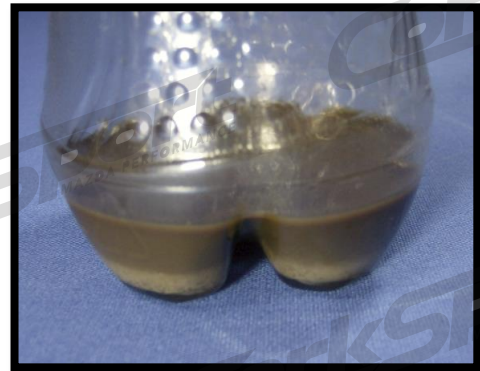
Figure 4b

5. Periodic Maintenance of your CorkSport Oil Catch Can (continued)

- a) The CorkSport Oil Catch Can will need to be emptied periodically using a ¼" allen. 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 5a**). Refer to Step#4.

**Figure 5a**

- b) 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 5b**).

**Figure 5b****Figure 5c**

- 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 5c**).

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.

Need Help With Your Installation?

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