



**JAMES BARONE RACING  
AFTERMARKET PARTS AND ACCESSORIES**

## **2004-2013 MAZDA 3/5/6 & CX-5 NON-SKYACTIV Mazdaspeed 3/6 & CX-7 Oil Catch Can Installation instructions**

### **Tooling:**

- ✓ Jack and jack stand
- ✓ Ratchet wrench
- ✓ Various extensions
- ✓ 8mm & 17mm sockets
- ✓ 5mm allen wrench
- ✓ Flat head screw driver
- ✓ Regular and needle nose pliers
- ✓ Teflon tape

### **Parts List:**

- ✓ 1 Fully assembled oil catch can
- ✓ 64" of 5/8" reinforced hose – (two 32")
- ✓ 1 quick drain valve
- ✓ 10" 3/8" hose with NPT fitting
- ✓ 6 hose clamps
- ✓ 4 zip ties

Before getting started it's important to plan for your installation. The following instructions are for an installation in the easiest and most common location. Use these instructions as a guide if you choose to install your catch can in a location other than described here. With all the various intercoolers and cold air intakes it would be impossible for instructions to be written for all possible scenarios. Some important things to consider if you're installing it in another location are: – How will the catch can be mounted? – Is there enough hose to reach? - Can the hose be properly routed? -Are there any additional fittings needed? Taking some time before you get started will ultimately save you a lot of time and headache later.

Ok now let's get started.

Copyright © 2019 James Barone Racing LLC. Any unauthorized reproduction or publication of this document is a strictly prohibited without the written consent from James Barone Racing.

1. Begin by parking on a smooth level surface with the emergency brake engaged. Jack up the front of the vehicle and position jack stands underneath both sides.



Refer to you vehicles owner's manual for proper jack placement and supporting procedures. **Never get under a vehicle without the proper support in place.**

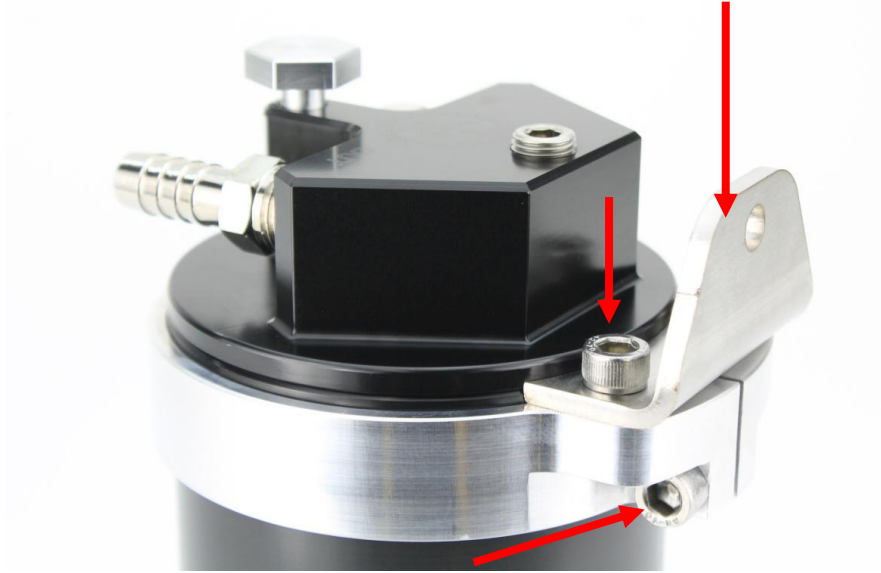
2. Apply Teflon tape to the threads of the drain valve. Attach the drain valve to the bottom of the catch can and tighten with a crescent wrench. Install the drain hose fitting into the bottom of the drain valve. This can be tightened by hand and does not need to be too tight.



3. Apply Teflon tape to the threads of the barbed fittings. Install the barbed fittings into the IN and OUT ports of the catch can using a 17mm deep socket.



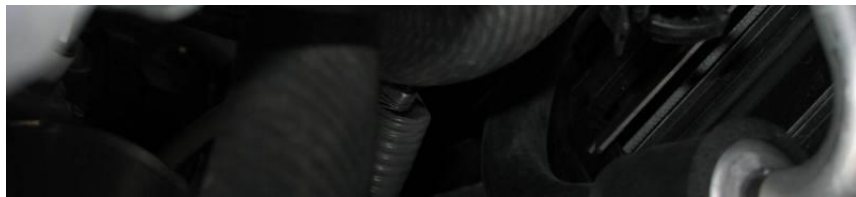
4. If you need to adjust the height of the mounting bracket or the location of the mounting bracket, ALL 3 socket cap bolts must be loosened using a 5mm allen wrench. (No need to adjust for this installation)



5. Next remove the engine's belly pan.
6. The catch can will be mounted in the area just in front of the driver side wheel well behind the front bumper. Using in the included 6mm bolt and lock washer, mount the catch can with the ports facing the passenger side of the vehicle to the frame hole closest to the rear of the vehicle. If the hole is rusty use some penetrating oil or W4-40 to remove the rust. Don't just try and force the bolt in; you will break it.



7. With the catch can mounted you are now ready to begin running the hoses. The area you'll be working in is between the radiator and the motor, under the intake manifold. Start by removing the oil dip stick tube to make room. Use an 8mm socket and remove the bolt holding the dipstick tube bracket. The picture below is the back side of where the bolt is located. Following the dipstick tube up from the oil pan is the easiest way to find it.



8. Next remove the plastic clip that holds the oil cooler hose to the dipstick tube and remove the dipstick and tube from the top of the vehicle.



9. Now the OEM PCV hose needs to be removed. This will require time and patience. If the clamps are located facing down you can most likely use your fingers and/or a pair of needle nose pliers to squeeze them and slip them back. Remove the intake side first.

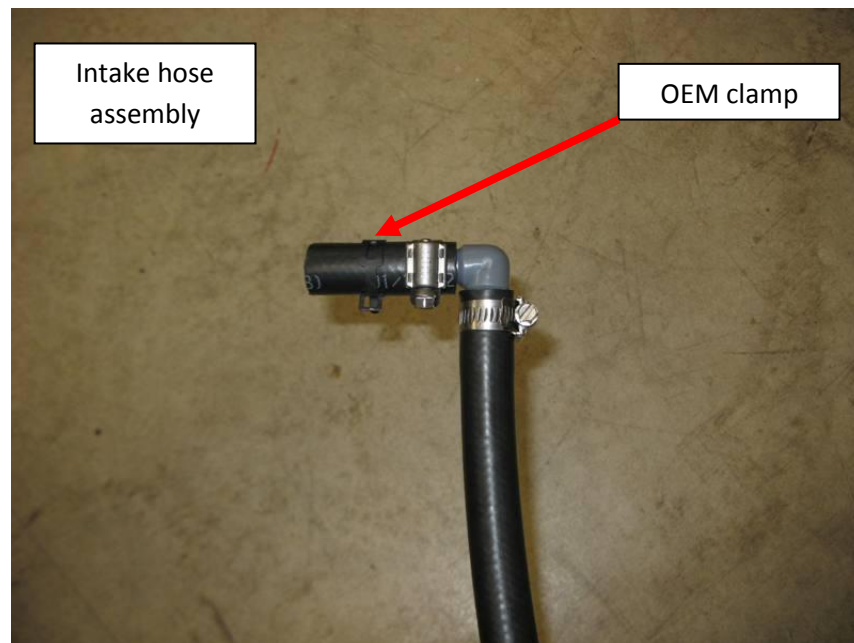
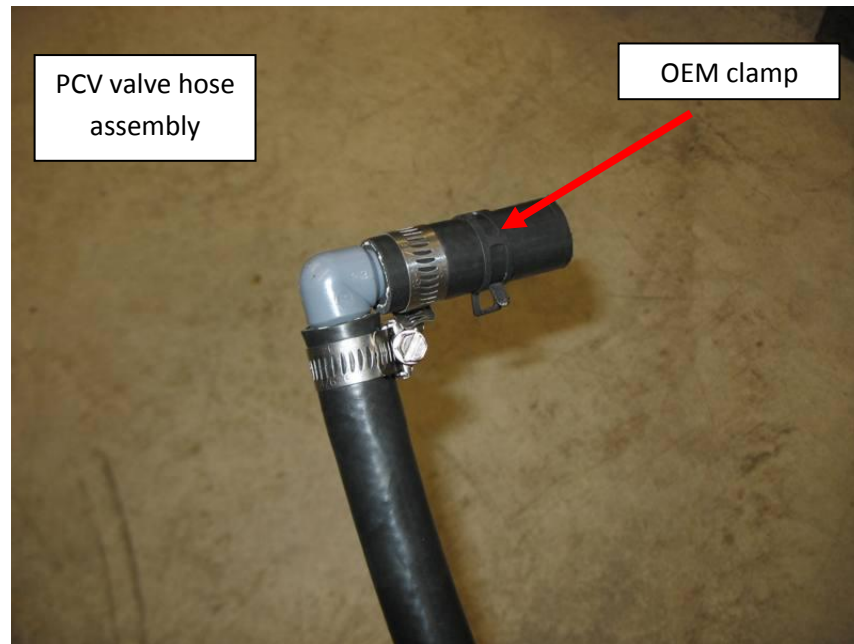


10. Now remove hose from the PCV valve. This is the most difficult to remove and will take some time. Be careful not to tug/yank too much on the hose; the PCV valve fitting is made of plastic. Remove the hose from the engine and save both clamps.

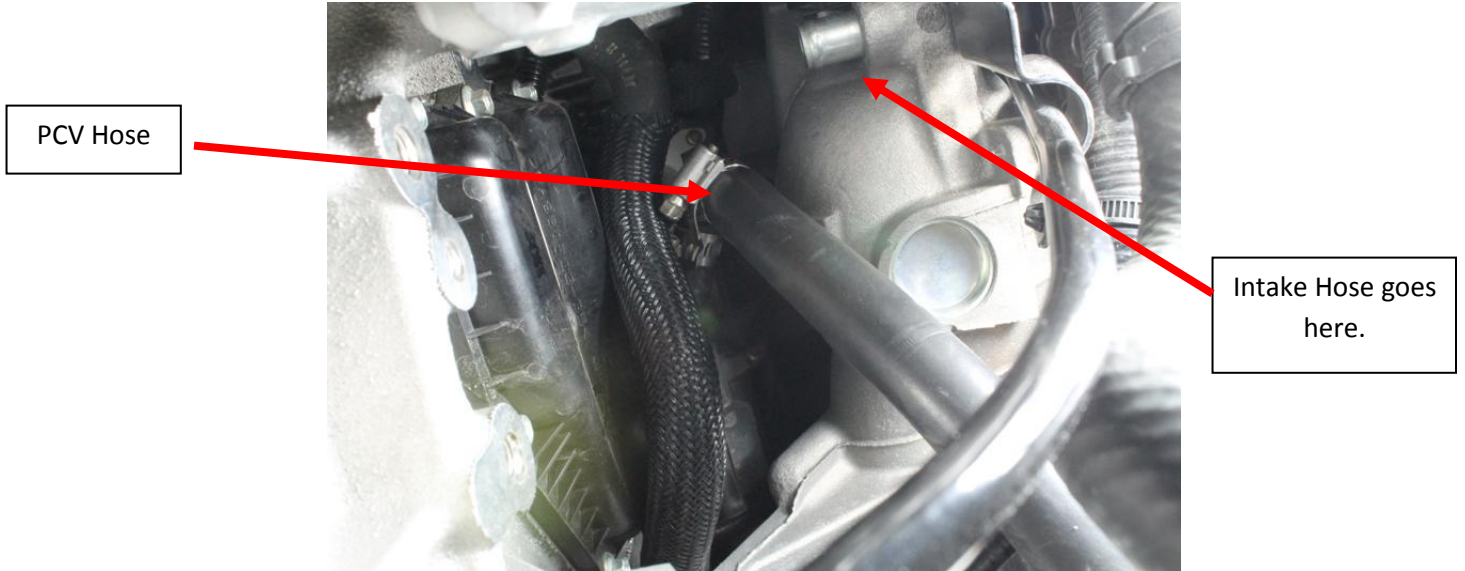




11. With the OEM PCV hose removed it's time to prepare the new hoses for installation. The hoses will need to look like the pictures below. With the hoses curved towards the driver side of the vehicle, install one elbow facing away from you and one with the elbow facing towards you. The hose with the elbow facing away will be for the PCV valve connection and the other will be for the intake connection. Orienting the elbows and hose in this manner will make the installation and routing of the hoses much easier. Use the hose clamps included in the kit along with the 2 OEM clamps you removed from the OEM PCV hose.



12. With the hoses prepared, you're now ready to install them. Install the PCV valve hose first and the intake hose second. Using a little oil or WD-40 inside the hoses will make it slip on easier.
13. Next, re-secure OEM clamps and route the new hoses to the driver's side of the oil cooler hose. The hoses need to be in this area to reach the catch can.

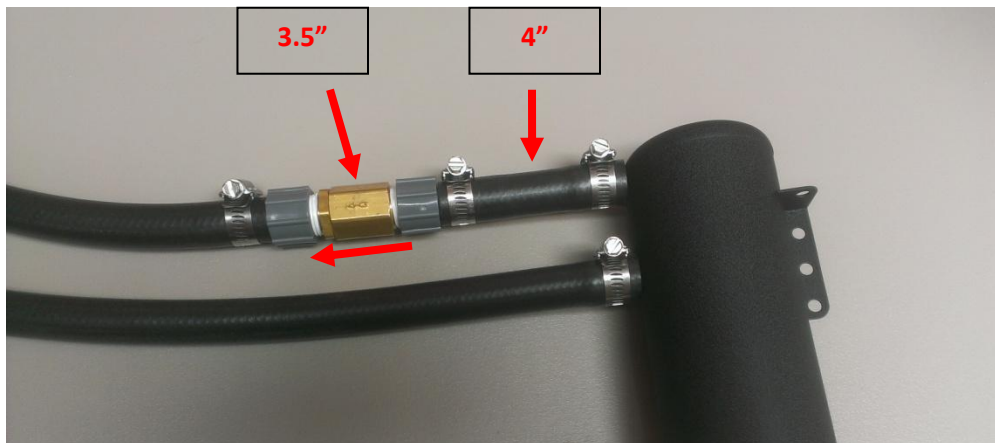


14. Now that the hard part is completed it's time to finish routing the hoses and to make the final connections to the catch can. Route the 2 hoses to the inside of the hard line going to the clutch slave cylinder. You will want the new intake hose to be routed on top of the new PCV hose.



15. Now, connect the hoses to the Catch can. Using a little oil or WD-40 inside the hoses will make them slip on easier. Connect the hose from the PCV to the IN port on the catch can. Connect the hose from the intake manifold to the OUT port on the catch can. Hold the catch can with one hand while pushing the tubing on with the other. You may or may not need to trim the hoses. You don't want too much hose pushing the catch can and causing it be angled. You also don't want so much hose that may cause dips in the hoses. The hoses need to be in a nice smooth downward arch from their connections up on the engine down to the catch can. If they are not routed as described above you may not have enough hose.

16. If you are installing the check valve, use a sharp razor knife or sharp pair of scissors and cut the hose from the intake 4" from the catch can. Then cut off another 3.5" from the remaining hose connected to the intake manifold. Using the two clamps supplied with your check valve kit, secure the check valve, with the arrow pointing towards the intake as illustrated below. This can be done from the top side of the engine after the hoses are connected or prior to the making the hose connections to the catch can.





17. Now it's time to wrap things up. Reinstall the dipstick tube.
18. Inspect the routing of the hoses to ensure they're not dipping.
19. Use the included zip ties to loosely secure the hoses together.
20. Replace the belly pan. You may either drill a hole in the pan for the drain hose or let it hang through one of the vents in the pan for easy draining.



➤ Draining the catch can should be performed at every oil change.

**Congratulations!! You've now completed the installation of  
your new JBR Oil Catch Can Kit!!**