

## INSTALLATION INSTRUCTIONS OIL CATCH CAN KIT

2013+ FR-S, BRZ, 86, ALL

**Document:** 19-0273

**Support**: info@radiumauto.com

20-0901 CATCH CAN KIT, PCV: Follow Steps 1-19

20-0902 CATCH CAN KIT, CCV: Follow Steps 20-33

20-0903 DUAL CATCH CAN KIT: Follow Steps 1-33

## **CATCH CAN SERVICING**

Check dipstick regularly. All vehicles are unique and will accumulate oil contaminants at different rates. Unscrew bottom portion of catch can and properly dispose of contents as needed. Do NOT return back into engine. If needed, stainless steel media can be cleaned with a degregaer

	degreaser.		
STEP	TOOLS NEEDED	INSTRUCTIONS	РНОТО
1	3mm Allen wrench 4mm Allen wrench	SECTION 1: 20-0901 PCV CATCH CAN KIT  Begin by preparing the catch can for installation. Use the four M5 countersink screws to fasten the bracket to the catch can.  Install the straight 10AN ORB to 8AN male adapter into the side port. Lubricate o-ring with engine oil and tighten.  Install the swiveling adapter fitting (to 6AN male) in the top port of the catch can and tighten. Make sure the O-ring is lubricated with oil.  Make sure a plug fitting is installed in the catch can bottom port. If a remote drain kit	
2	10mm socket	Locate the ground wire connection near the battery on the RH strut tower.  Remove this bolt using a 10mm socket. This bolt will be reused.	
3	10mm socket	Further back, near the fender, locate the bolt shown and remove with a 10mm socket.  This bolt will be reused.	
4	12mm Socket	Remove the nut that secures the negative cable to the battery terminal.  Rotate the cable 90 degrees and reinstall the nut.  The cable should now look as shown in the picture.	

5	10mm Socket  4mm Allen Wrench	Place the catch can assembly in position next to the battery. Line up the mounting holes in the bracket with the holes where the fasteners were removed in previous steps.  At the location where the ground wire was attached to the body, slip the ground wire ring terminal under the catch can bracket as shown. Note: If installing on a right hand drive vehicle, use the included washer in place of the ring terminal.  Install the M6 screw that was removed from this location. Do not tighten.  Locate the hole next to the ground wire.  Slip one of the included M6 washers under the bracket and install the included M6 screw as shown.  Thread on the included M6 nut to the screw, but do not tighten yet.	
7	10mm Socket 4mm Allen Wrench	At the third and final hole, slip the other included M6 washer under the bracket then install the screw previously removed from this location.  You may now tighten all 3 mounting screws.  Note: If this was installed into a left hand drive vehicle, as depicted, one M6 washer will be unused.	
8		The catch can assembly will now look as pictured. Ensure no parts are positioned too close to the battery terminal.  Loosely install the straight 6AN Push-Lok hose end on the swivel fitting as shown.	
9		For right hand drive (RHD) vehicles, there are 2 brake lines (shown with arrows) that are in close proximity to the catch can.  These will need to be simply bent slightly out of the way. Be sure not to kink or put too much stress onto the ends of the hard tubes.	
10	Long-reach pliers	Carefully remove the cover from the center of the intake manifold.  Disconnect the large diameter PCV hose that is attached to the vacuum port.  Disconnect the other end from the PCV valve located on the engine block and remove it from the vehicle.  This OEM hose will not be reused.	

11	Long-reach pliers	Shown is the PCV valve with the hose removed.  Locate the section of 3/8" (6AN) hose from the catch can kit and install one end on the	
12	Long reach pilets	PCV valve. Secure with the included spring-type hose clamp.	
13	Hose cutter	Route the other end of the hose from the previous step to the catch can top port. Line up the hose with the push-lok hose end to get an accurate estimate of length. Allow some slack in the hose for engine movement. Cut to an appropriate length.	
14	Oil	Remove the push-lok fitting from the catch can swivel fitting. Fully insert the aforementioned hose to the hose end. Apply oil to the barbs to make the process easier.  NOTE: push lok hose ends do not require hose clamps.	
15	11/16" Wrench	Attach the hose to the swivel fitting on the catch can top port. Tighten hose end.	AND THE PARTY OF T
16	Oil	Install the straight 8AN push-lok hose end into the end of the 1/2" (8AN) hose in the kit. Apply oil to the barbs on the fitting to make this process easier.  NOTE: push lok hose ends do not require hose clamps.	

17	7/8" Wrench	Screw this hose to the fitting installed in the side port of the catch can and route the hose toward the intake manifold.	
18	Hose cutter Pliers	Route the 1/2" hose to the intake manifold port from earlier.  Cut the hose to the proper length.  Secure the hose using the spring-style hose clamp included in the kit.	
19	Diagonal Cutter	Use the included zip ties to secure the hoses to each other. Pay close attention to possible chafing points. Reinstall the plastic cover on the center of the intake manifold. INSTALLATION COMPLETE.  Note: Radium Engineering catch cans are pressure sealed and designed to withstand boost pressure. For turbo and supercharger applications, these hoses can remain routed as instructed. There will be boost pressure in the hoses and catch can from the intake manifold, but the PCV valve will be closed.	
20	3mm Allen wrench 5mm Allen wrench	SECTION 2: 20-0902 CCV CATCH CAN KIT  Begin by preparing the catch can for installation. Use the four M5 countersink screws to fasten the bracket to the catch can.  Install the straight 8AN fitting in the side port. Make sure the O-ring is lubricated.  Install the 8AN swiveling fitting in the top port of the catch can.  Make sure a plug fitting is installed in the catch can bottom port. If a remote drain kit is going to be used, replace the plug with the provided adapter.	
21	10mm Socket	On the left side strut tower, use a 10mm socket to remove the screw shown in the picture.  Unclip the plastic cable guide and remove. It will not be reused.	
22	10mm Socket	Further back towards the firewall, remove the M6 screw shown in the picture.	

23	10mm Socket 4mm Allen Wrench	Place an M6 washer over each of the 3 hole locations where the catch can bracket mounts.  Note: For right hand drive vehicles, the battery grounding ring terminal will be used in place of the one aforementioned washer to space the bracket off the chassis.  Place the catch can and bracket in position and line up the mounting holes on the bracket with the holes from the previous steps.  Reinstall the OEM bolt. Do not tighten yet.  Install the M6 screw and nut included in the kit. Do not tighten yet.	
25	10mm Socket	Reinstall the OEM screw into the bracket's last mounting hole.  Make sure there is an M6 washer between the bracket and the body.  Tighten all mounting bracket fasteners.  Note: If this was installed into a right hand drive vehicle, you will be left with one extra M6 washer.	
26	Pliers	Disconnect the crankcase breather from the intake pipe fitting.	
27	Pliers	Install the provided plastic male-to-male hose barb union fitting into the end of the hose. Re-use the factory spring clamp.  Locate the %" (8AN) hose included in the kit and install one of the staight 8AN push-lok	

	- 1-11	Connect the hose from the previous step to the top catch can fitting.	
29	7/8" Wrench		
	Hose Cutter	Route the hose from the previous step to the crankcase breather hose and cut it to an appropriate length. Push the hose onto the installed plastic male to male hose barb	
	Pliers	union. Secure with one of the spring style hose clamps from the kit.	
30		NOTE: For a cleaner appearance, the catch can hoses may be routed underneath the intake manifold.	
	7/8" Wrench	Install the last straight 8AN push-lok hose end into the remaining section of ½" (8AN) hose. Some lubrication may be necessary. NOTE: push lok hose ends do not require	
		hose clamps.	
		Connect to the side port catch can fitting (shown).	
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	Hose Cutter	Route the hose to the intake pipe fitting and cut to length. Secure using the OEM spring clamp.	
	Pliers	_	
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32		-	Code Code
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	Diagonal Cutter	Use the included zip ties to secure the hoses to each other. Pay close attention to possible chafing points. Make sure all fittings and hoses are tightened. <b>INSTALLATION</b>	
		COMPLETE.	
		NOTE: For turbocharger and centrifugal supercharger applications, this catch can side port hose must be routed into the inlet of the turbocharger or centrifugal	
33		supercharger. It should NOT be plumbed into a compressor pipe.	