INSTALLATION INSTRUCTIONS

Honda S2000 Oil Catch Can Kit
RHD & 06-09 LHD Models Only

Document# 19-0062
For support: **info@radiumauto.com**

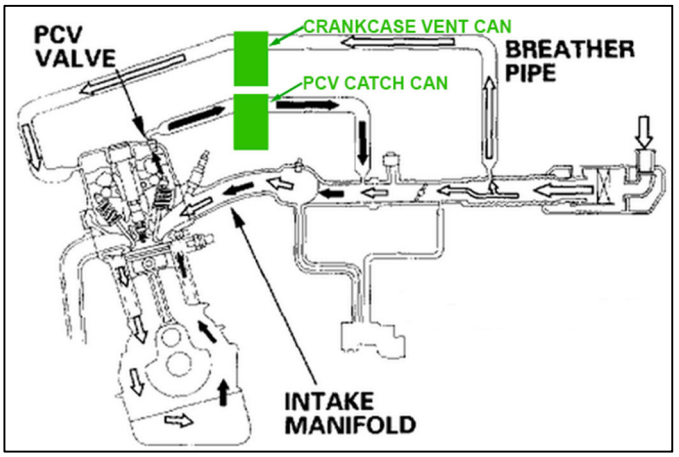
Qty	Crankcase Vent Oil Catch Can Kit
1	Radium Engineering Catch Can Assembly
1	Anodized Straight Push Lok -8AN Hose End
1	Anodized 120 Degree Push Lok -8AN Hose End
2	Anodized -8AN Male to -10AN Male O-Ring Adapter
1	S2000-Specific Powder Coated Mounting Bracket
4	Stainless Steel M5 Countersink Screws
1	Stainless Steel M6 Button Head Screw
1	1/2" OD Male to Male Barb 90 Degree Elbow
60in	1/2" ID Rubber Hose
11in	5/16" ID Rubber Hose
72in	5/32" ID Rubber Hose

Qty	PCV Oil Catch Can Kit
1	Radium Engineering Catch Can Assembly
1	Anodized Straight Push Lok -6AN Hose End
1	Anodized 90 Degree Push Lok -6AN Hose End
2	Anodized -6AN Male to -10AN Male O-Ring Adapter
1	S2000-Specific Powder Coated Mounting Bracket
1	Universal Powder Coated Mounting Bracket
4	Stainless Steel M5 Countersink Screws
72in	3/8" ID Rubber Hose
2	OEM Style Spring Loaded 3/8" Hose Clamps
3	Stainless Steel M6 Button Head Bolts
3	Stainless Steel M6 Flange Nuts

The S2000 "crankcase vent" kit connects inline to the valve cover's breather port.

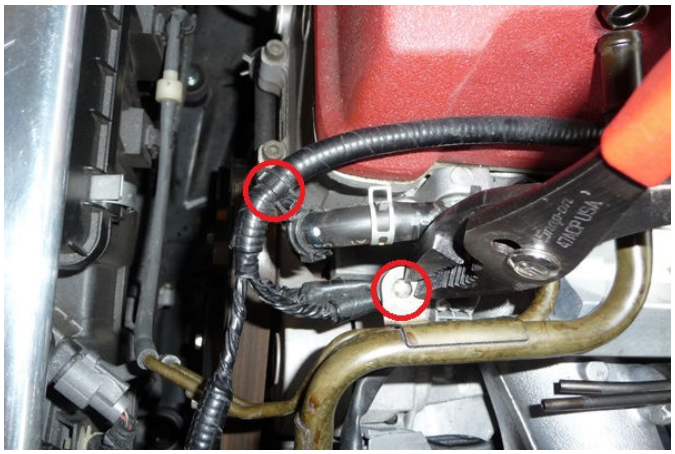
An optional "PCV" oil catch can be purchased for optimal overall system performance. This connects inline to the PCV (positive crankcase ventilation) valve.

Pictured at right is a schematic of the Honda S2000 crankcase ventilation system. Shown in green is how the oil catch can(s) will be plumbed into the crankcase ventilation system.



1. Open the hood. Place a rubber mat or green automotive tape over the front left fender to protect the paint.

Next, the metal tube assembly found on the top of the intake manifold above cylinder #1 runner will be removed. This will differ depending on the model year of the S2000. Using a pair of pliers, squeeze and release the white plastic clip (circled) that holds the wiring harness. Next, unlock and separate the black plastic harness-hose connection (circled).



2. Using the pliers, squeeze and release the spring clamp on the hose that attaches to the valve cover breather nipple.

Carefully pull the hard line out of the air intake hose and off the valve cover barb.

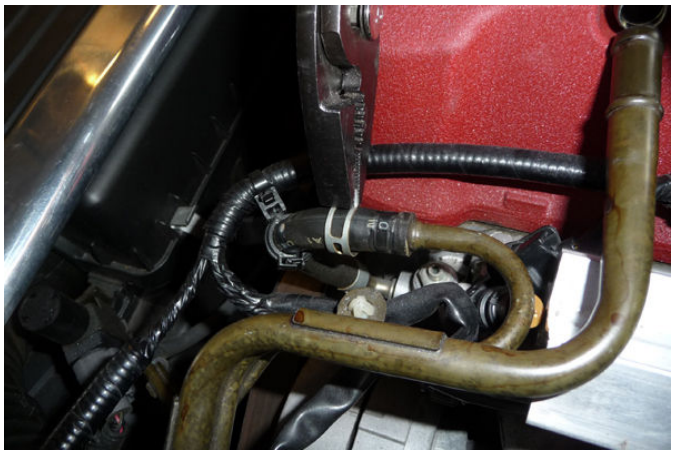
All 3 spring clamps on this connection will be reused.

Note: if the vehicle is fitted with an aftermarket intake system, this process may slightly differ.

3. Use a pair of pliers to squeeze and slide both the spring clamps down the 5/16" coolant hoses that connect to the metal tube assembly barbs.

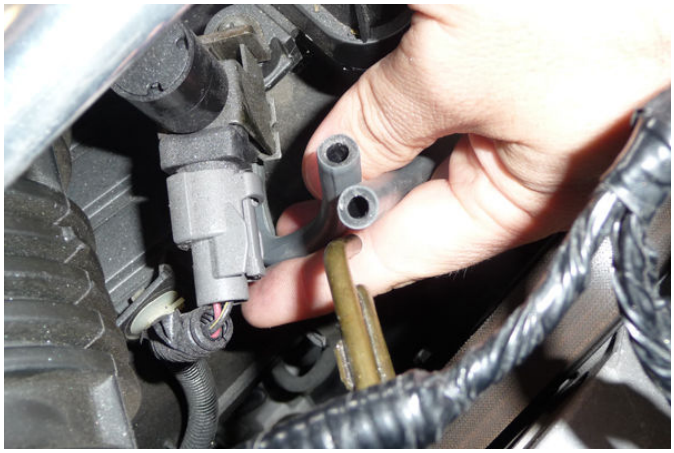
Pull the 5/16" coolant hoses off the metal tube assembly on each end. Have a rag handy as some coolant will leak out.

Note: Upon completion of installing this kit, consider refilling the radiator to make up for the coolant lost in this step.



4. On S2000 models that have the early Honda Secondary Air Control Valve system, carefully pull the front two lower air control valve system vacuum lines downward and off the metal tube assembly, as shown.

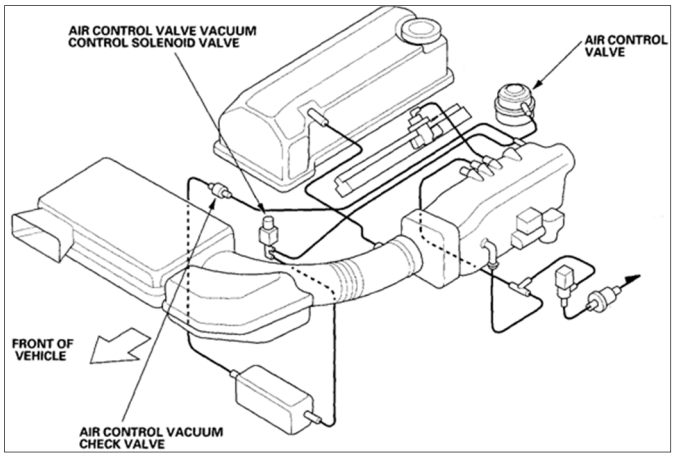
After the metal tube assembly is removed from the vehicle in the next step, pull these hoses (shown) off the air control vacuum solenoid (shown) and air control vacuum check valve (in front of engine behind the radiator fan). These OEM vacuum hoses will be discarded and replaced.



5. Remove the metal tube assembly from the vehicle (early model shown). This will not be re-used.
Next, remove the remaining coolant hoses by removing the spring clamps. Slide the black plastic harness-hose connector off the air bleed inlet hose and install it to the 11" long (5/16" ID) heater hose included in the kit.
Now, connect this included coolant hose to the throttle body and air bleed inlet barbs. Reuse the OEM spring clamps. Reconnect the wiring harness back to the coolant hose using the black connector.

6. When routing the included vacuum hoses (early models only), use this diagram for component reference. Keep hoses away from serpentine belt on the front of engine.

If using the early OEM fuel rail, the 2 hard tubes mounted underneath the fuel rail can be reused, if necessary. Cut the included 5/32" vacuum hoses to ~1ft and ~1.5ft sections. However, there is enough hose included to bypass the 2 hard tubes. Cut ~3ft and ~2.5ft sections and attach the hoses directly to the air control valve and intake manifold barbs.



7. Gently lift the coolant overflow reservoir upwards and off the mounting bracket and temporarily set aside.

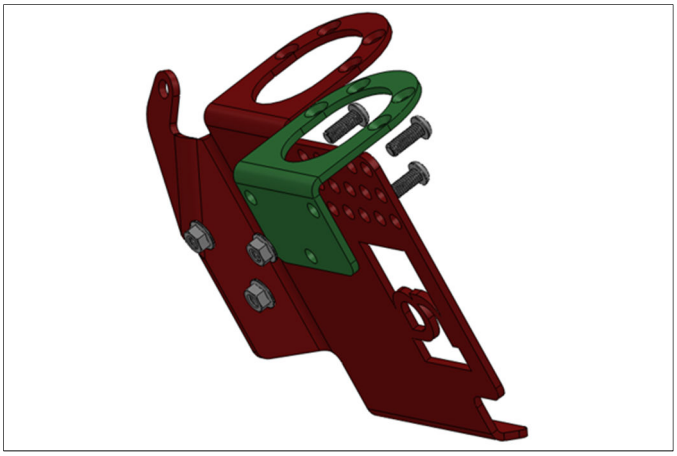
Using a 10mm socket wrench, remove the two M6 bolts that secure the coolant overflow tank bracket (shown) to the frame rail. Discard the 2 bolts as these will be replaced with the included longer M6 Allen head bolts.

RHD ONLY: Use a 12mm socket to remove the M8 bolt securing the horn. Relocate to a nearby area keeping the horn outlet facing downwards to avoid moisture collection.

8. If the PCV and Crankcase Vent catch cans were both purchased, attach the 2 included catch can brackets together using the 3 sets of button head bolts and flange nuts.

Attach the small catch can bracket to the backside of the S2000-specific bracket mount, as shown. Install the flange nuts on the backside.

If only the PCV catch can kit was purchased, discard the small mounting bracket and only use the S2000-specific bracket.



9. Set the coolant overflow reservoir bracket back in its normal location, but do not reinstall the 2 bolts.

Next, place the Radium bracket on top of the OEM coolant overflow reservoir bracket and install the included bolts. Use the extra Allen head screw to secure the Radium bracket to the chassis wall.

Note: Picture shown with both catch can brackets attached.

10. Using the 2 included -8AN male to -10AN port fittings, install into the crankcase vent catch can's ports, as shown.

Confirm there are O-rings on the 7/8"-14 thread (-10AN) side.

11. If the PCV catch can was purchased, find the 2 included -6AN male to -10AN port fittings. Install each into the PCV catch can's ports, as shown.

Confirm there are O-rings on the 7/8"-14 thread (-10AN) side.

12. Apply a medium strength thread locker to the included M5 countersink Allen head screws. Lower the can(s) down underneath the mount(s). Using a 3mm Allen wrench, secure the catch can(s) to the bracket and torque to 68 in-lbs.

Notes:
1. The catch cans can be swapped from one bracket to the other. Just know that the suggested hose lengths may differ.
2. For dual catch can RHD S2000s, the nearby hard tube A/C line will require modification for rear can fitment clearance.

13. If a hose cutter (shown) is not available, carefully cut the hose with a razor blade as square across the hose as possible.

Find the included 1/2" ID hose in the kit. For the catch can side port, the hose will route underneath the intake. If the OEM intake is being used, measure and cut the hose to ~18". Cut the left over hose to ~30" for the top port.

Note: The 1/2" hose is extra long in order to accommodate aftermarket intakes. Cut the hose to the appropriate length.

14. Find the included -8AN push-lok 120 degree and straight hose ends in the kit.

Lubricate the barbs on both hose ends with a drop of lubricant, such as engine oil. Insert each barb into the respective hose. The straight hose end will be used for the catch can side port hose. The 120 degree hose end will be used for the catch can top port hose. Slip the hose on all the way until fully seated. For ease of insertion press against a hard flat surface, as pictured. Hose clamps are not required.

15. For OEM air intake systems, insert the included 90 degree barb to barb connector into the opposite end of the side port hose.

Use a drop of engine oil for lubrication.

Use the factory OEM spring clamp (as shown).

16. When routing the top port hose, make sure it will not come in contact with the serpentine belt on the front of the engine.

When attaching the 90 degree barb adapter, use the factory OEM spring clamp. A tip is to use locking pliers, such as Vise Grip, to release the compression from the spring clamp while simultaneously inserting the barb into the factory intake system, as shown.

Use a drop of engine oil for lubrication if necessary.

17. Route the catch can's top port hose under the throttle body staying clear of moving parts. Albeit a tight fit, the 1/2" hose and OEM spring clamp can squeeze onto the valve cover barb, as pictured. Tighten the hose ends to the catch can using a 7/8" wrench (preferably a non marring wrench).

If the engine is boosted, the top port hose will remain as-is. However, the side port hose should be routed to the turbo inlet pipe (not the charge pipe). Use 1/2" ID heater hose or push-lok hose for this type of installation.

18. If the optional "PCV" catch can kit was purchased, please follow the instructions below.

Use a pair of pliers to squeeze and release the spring clamps away from the opposing barbs. Note: AP1 S2000 PCV valves will look slightly different than the pictured AP2 PCV valve.

Gently pull the hose off the PCV valve and off the intake manifold barb.

Discard the OEM hose and OEM spring clamps.

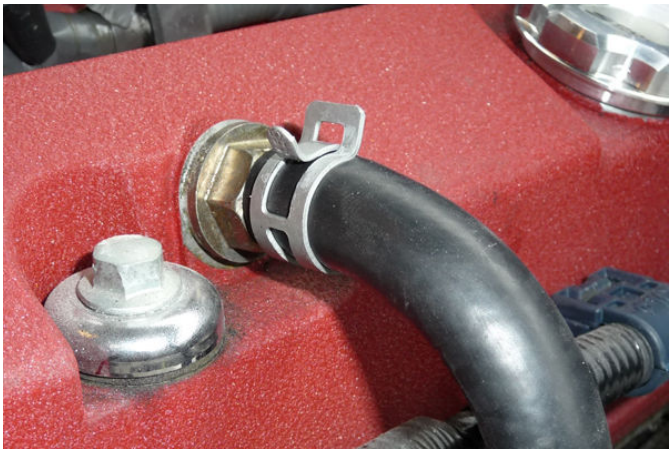
19. Cut the included 3/8" ID hose to ~30" and ~36" lengths.

Attach the 30" hose to the -6AN straight hose end.

Attach the 36" hose to the -6AN 120 degree hose end.

20. Route the hoses underneath the intake manifold and attach to the respective barbs. The top port routes to the PCV (shown) and the catch can side port routes to the intake manifold. Use the included OEM spring clamps. Tighten the hose ends to the catch can using a 11/16" wrench (preferably a non marring wrench).

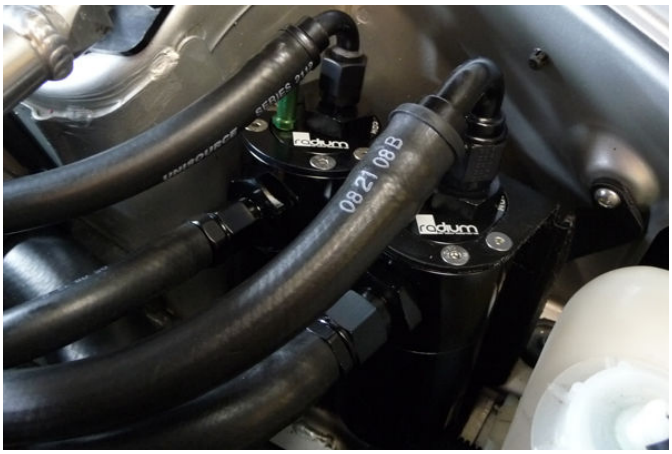
NOTE: Radium Engineering catch cans are O-ring sealed and can withstand boost pressure. If the engine is boosted, these hoses can remain routed as-is.



21. Shown is the dual catch can kit installed on a LHD vehicle.

The crankcase vent catch can is located on the right side and the PCV catch can is on the left side. As noted above, these can be swapped, but suggested hose lengths will differ.

Before starting the vehicle, double check that there are no interferences with any moving parts or extremely hot components.



22. Using the oil dipstick, check the fluid level occasionally. If the vehicle is regularly tracked, the dipstick should be checked frequently. Properly dispose the oil by either unscrewing the bottom half of the can(s) or using the optional petcock valve if purchased.

The condenser media should also be inspected regularly for excessive debris which can cause restriction. The stainless steel media will not corrode and can easily be cleaned in a parts washer or simply using soapy water.