



INSTALLATION INSTRUCTIONS

MITSUBISHI EVOLUTION VIII & IX

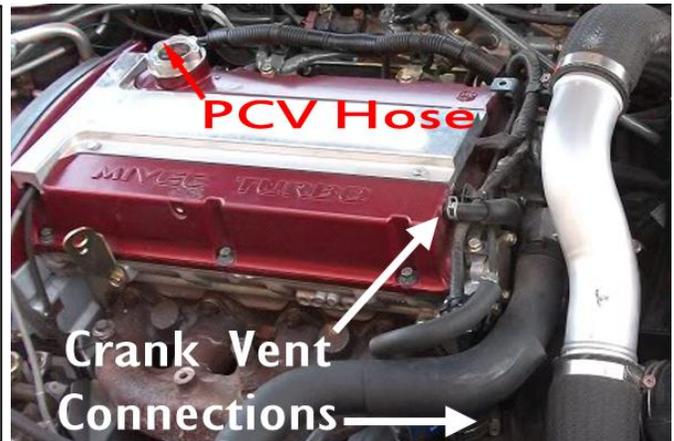
OIL CATCH CAN KIT

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The EVO VIII/IX catch can kit is available in 3 variations. Installing in a right hand drive car is not covered in this manual, but will take similar steps. The PCV kit installs between the PCV valve and the intake manifold. The crankcase kit installs between the valve cover vent port and the pre-turbo intake pipe. These 2 kits are covered in Section 1. The VTA kit requires welding and vents the valve cover to atmosphere through the catch can. See Section 2 for details.

Section 1: PCV and Crankcase Catch Can Kit Install

1. Use a 14mm socket wrench to remove the strut bar. There are 3 nuts on each side and 2 bolts in the center. The PCV valve is found on the backside of the valve cover. The short OEM PCV hose connects to the intake manifold near injector 1. The crankcase vent hose is found on the left hand side of the valve cover and attaches to the intake tube. Loosen spring clamps and remove both hoses. The PCV hose will be reused for PCV kits. The crankcase vent hose can be discarded.



2. Prepare the catch can(s) for installation, as shown.

Install and tighten the -6AN fitting on the top and the barbed fitting on the side. Make sure there are O-rings present on the fittings that screw into the catch can(s). Make sure a plug fitting is installed in the bottom of the catch can(s).

Using a 3mm Allen wrench and the included countersink screws, secure the catch can(s) to the mounting bracket(s) using a medium thread locker, such as blue Loctite.



3. Place the included washer(s) on the outer stud to shim the strut bar. Lineup the can(s) to the 2 inner strut studs. Note: The PCV bracket will be close to the A/C hard line. If necessary, gently push this line away to prevent abrasion.

For the PCV kit, cut roughly 8.5" of hose to connect the intake manifold barb to the catch can side barb fitting. Reuse the 2 OEM spring clamps. For the crankcase vent kit, cut roughly 22.5" of hose to connect the catch can side barb fitting to the intake pipe. Reuse the 2 OEM spring clamps.



4. For both catch can kits, apply lubrication onto the barbs of the included 90deg hose end(s). Push the included 3/8" hose fully onto the hose end barbs, as shown. Note: Push-Lok does not require any hose clamps for proper sealing.

Temporarily screw this hose assembly into the cans' top fitting. For the PCV kit, cut roughly 7.5" of hose and route towards the PCV valve. For the crankcase kit, cut roughly 21" of hose and route towards valve cover barb. Use the included clamps on the ends without the Push-Lok fittings.



5. Reinstall the strut bar. Make sure the two interior bolt holes still line up now that the strut bar has been raised roughly 0.10".

The installation is now complete and should look as shown.

Note: Radium catch cans are pressure sealed and designed to withstand boost pressure. For the PCV catch can kit, there will be boost pressure in the hoses and catch can from the intake manifold, but the PCV valve will be closed.



6. If the optional petcock drain kit(s) were purchased, replace the plug fitting(s) on the lower bottom port of the catch can with the included barb adapter(s).

This will be a close tight fit on both catch cans, but manageable.

Place the valve(s) in an easily accessible location. Avoid routing the included 1/4" hose near moving and/or hot components.



7. Use the oil dipstick to 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 in the crankcase ventilation system. The stainless steel media will not corrode and can easily be cleaned in a parts washer or simply using soapy water.



Section 2: Crankcase VTA Catch Can Kit Install

28. Review the instructions above **Section 1: PCV and Crankcase Catch Can Kit Install** for mounting the catch can to the LH bracket. Install the included barb and air filter to the catch can side port (as shown). Next, install the -10AN ORB male fitting to the top port of the catch can.



29. Reference an OEM Mitsubishi service manual and remove the valve cover.

Find a suitable location to weld the included aluminum -10AN male bung.

Drill a 1/2" hole and scuff and prep the area for welding.



30. Find the two 90 degree -10AN push-lok hose ends and the 5/8" PCV hose in the kit. Temporarily install 1 hose end to the valve cover port and the other to the can's top port.

Next, measure and cut the 5/8" PCV hose to length. Insert each hose end into the PCV hose. Tighten each hose end to their respective ports using a non-marring wrench.

Use one of the included vacuum caps to plug the turbo inlet barb (shown).



31. For applications that are still using a MAF sensor, the PCV hose should be removed. If not removed, a very small amount of "unmetered" air will enter the system through the catch can's breather filter. Install 1 of the included vacuum caps to the PCV valve (shown) and another vacuum cap to the intake manifold barb (not shown).

For applications that have converted to "speed density" via a MAP sensor, the PCV hose CAN remain in place.

Furthermore, the Radium 20-0116 PCV Catch Can kit is recommended for the best performance and protection.

