

INSTALLATION INSTRUCTIONS

Oil Catch Can Kit BMW M3 01-06

Kit# 20-0073-FL Document# 19-0055 Support: info@radiumauto.com



Item Description	Qty
Bracket, Catch Can, BMW E46	1
Catch Can	1
5/8 PCV/FUEL HOSE	7 ft
10AN ORB TO 10AN MALE FITTING	1
PUSHLOK HOSE END, 10AN STRAIGHT	2
SPRING CLAMP, 5/8" HOSE	2
10AN ORB SWIVEL BANJO TO 10AN MALE	1
M8 Washer	1
Hex Nut, M8 x 1.25, SS	1
BHSCS, M6 X 1.0, 12mm Long, SS	1
M8 Lock Washer	1
M8 Rubber Mount	1
CATCH CAN SERVICE INTERVAL STICKER	1

1. The catch can is mounted in the engine bay on the passenger side (RH side). *This kit was not designed for RHD vehicles*.

Note:

For 01-02 BMW M3, the ABS unit is mounted in this compartment. The included rubber isolated stud will not be used. Instead, use a 13mm socket and temporarily remove the factory M8x1.25mm bolt shown.

For all other M3 models, thread the included rubber isolated M8x1.25mm stud into the empty boss.



2. Install the mounting bracket to the 2 factory locations. For all models, use a 4mm Allen wrench and secure the included M6x1mm button head bolt to the boss near the ground lug, as shown.

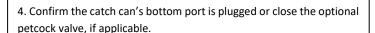
For 01-02 M3, reuse the factory M8x1.25mm bolt (removed in previous step) to secure the bracket to the lower rear boss. NOTE: The M8x1.25mm nut, washer, and lock washer will NOT be used. For all other M3 models, first install the included M8 washer. Next, put the M8 lock washer on. Now torque the included M8x1.25mm nut to the rubber isolation stud using a 13mm socket.



3. Lubricate the O-ring and tighten the straight adapter fitting into the side (outlet) port using an adjustable wrench. Install banjo fitting to the catch can top port.

NOTES:

- 1. For kits manufactured after August 2020, a stainless steel swiveling fitting is included (shown). Tighten using a 6mm Allen wrench.
- 2. For kits manufactured prior to August 2020, a green banjo fitting is included (not shown). Be sure the black banjo fitting is oriented so the AN male portion is at the highest point. The hose end will not clear the catch can if the banjo fitting is installed upside down. Orient properly and tighten using a 1-1/8" socket.



Apply a medium-strength thread locker to the four M5x.8mm countersunk screws.

Using a 3mm Allen wrench, secure the catch can to the mounting bracket using the 4 screws.





5. The factory 01-04 E46 M3 PCV tubing routes from the valve cover back to the intake manifold (pre throttle). The catch can hoses will be plumbed between these two connections. NOTE: See Step 5a below for the 05-06 M3's secondary PCV system.

To remove both factory tubing connections, squeeze the plastic tube fittings (shown) and pull away simultaneously.



5a. The 05-06 M3 models have a secondary PCV system (shown). All of the modifications in these instructions apply for the 05-06 M3 models. However, when the valve cover fitting is spun around in the following steps, the small 05-06 convoluted tubing will stay intact and simply reroute accordingly.

NOTE: The electric solenoid valve is closed at WOT, so blow-by vapors will not enter the intake during this period.



6. Next, it is necessary to remove the plastic convoluted tubing from the 2 barbed fittings.

Use a razor, such as a utility knife or box cutter, and carefully slice into the tubing where it secures to the barbs. Be careful not to cut into the barbed fittings.

Confirm both fittings are not damaged.



7. Cut a 19" section from included hose. Install between the valve cover and catch can top port. If installing the catch can back to the OEM intake manifold port, cut a 25" section from the hose. Install between the intake manifold and the catch can side port.

If installing the catch can to an aftermarket intake manifold, supercharger, or turbo kit, cut the extra hose accordingly.



8. Each rubber hose will need 1 of the included hose ends installed. To assemble, simply lubricate the barbs of the included push-lok hose end. A drop of engine oil will suffice.

Using a hard surface push the hose downwards onto the push-lok barbs until the hose is fully seated, as pictured. NOTE: Once installed, the push-lok hose end is permanently attached. Hose clamps are NOT necessary for the push-lok hose ends.

Install one push-lok hose end on each hose.



9. Next, the hoses will need to be routed through the compartment wall into the engine bay.

Temporarily remove the short factory BMW rubber trim (shown) by carefully pulling upwards.



10. In order to pass the 2 hoses through the compartment wall, remove the factory plastic Phillips head fastener (shown) and plastic block off plate (shown).

To remove the insulation (shown), tear along the precut dashed lines.

There will now be an exposed rectangular shaped opening that allows two -10AN hoses to pass through.



11. Slide the supplied clamps onto each hose and install the factory BMW plastic barb fittings. Lubrication may be required. To secure, use pliers and slide the clamps over each fitting. Press and lock both OEM fittings back into place.

At the catch can, tighten each hose end B-Nut to the respective male fittings on the catch can. NOTE: The use of an adjustable aluminum wrench will prevent marring.



12. Hose plumbing is shown.

Installation is now complete.



Optional Petcock Drain Kit

Replace the plug fitting on the lower bottom port of the catch can with the included barb adapter. This will be tight on the BMW E46, but manageable. Place the valve in an easily accessible location. Avoid routing hose near suspension and/or hot components.



Servicing Information

It is recommended to check catch can fluid level every 5,000 miles (8,000km).

It may be necessary to check more frequently in cases of extreme use.

Catch can contents can be monitored using the dipstick. When collected fluid reaches a certain level, a float ball in the catch can will block the passage into the collection chamber and the catch can will not collect any additional fluid. However, air will still freely flow through the catch can.

To empty the catch cans, unbolt the catch can bracket from the vehicle body. Lift the assembly up as high as possible. Unscrew the bottom half of the catch cans. Carefully drain contents into an oil-safe container and dispose of in the same manner as used motor oil.

