



INSTALLATION INSTRUCTIONS

Oil Catch Can Kit

BMW E46 3-Series (non M3)

Kit# 20-0873-FL

Document# 19-0355

Support: info@radiumauto.com



20-0873-FL	
ITEM DESCRIPTION	QTY
CATCH CAN, FLUID LOCK, PREASSEMBLED	1
BRACKET, CATCH CAN, BMW E46	1
10AN ORB TO 10AN MALE FITTING	1
10AN ORB SWIVEL BANJO TO 10AN MALE	1
PUSHLOK HOSE END, 10AN STRAIGHT	3
PUSHLOK HOSE END, 10AN 90DEG	1
V2 QUICK CONNECT, 19MM FEMALE TO 10AN MALE STRAIGHT	1
V2 QUICK CONNECT, 19MM MALE TO 10AN MALE STRAIGHT	1
M8 LOCK WASHER, STAINLESS STEEL	1
M8 WASHER, STAINLESS STEEL	1
M8X1.25MM HEX NUT, STAINLESS STEEL	1
M6X1X12MM BUTTON HEAD SCREW, STAINLESS STEEL	1
M8X1.25MM RUBBER MOUNT	1
10 INCH NYLON CABLE ZIP TIE	3
CATCH CAN SERVICE INTERVAL STICKER	1
5/8IN PCV/FUEL HOSE	9FT

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

NOTES:

1. For early E46 vehicles, 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.
2. For later E46 vehicles that have nothing in this compartment, 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.

NOTES:

1. For early E46 vehicles, 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.
2. For later E46 vehicles, first install the included M8 washer. Next, put the M8 lock washer on.

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 and tighten using a 6mm Allen wrench.



4. Confirm the catch can's bottom port is plugged or close the optional petcock valve, if applicable.

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 crankcase vent tubing routes from the valve cover to the OEM AOS. The catch can hoses will be plumbed between these two connections.

To remove the connector from the valve cover port, squeeze the plastic tube fitting and pull away simultaneously.



6. The next step will be rotating this connector around 180 degrees with respect to the tubing.

NOTE: Shown is the OEM tubing connection in question. It does not HAVE TO be removed from the vehicle as shown.



7. Carefully rotate the hose end fitting shown. This is the end of the tubing that connects to the valve cover. Oil lubrication can help.



8. Lubricate the O-ring found on the provided V2 quick connect male fitting. Press the fitting into the valve cover port. Slide the green lock into position. Lineup the holes of the lock with the threaded holes in the fitting. Secure the green lock with the provided M3 x 0.5 x 5mm screws and a 2.5mm Allen wrench.

Push the female V2 quick connect fitting into the OEM tube fitting until it fully locks into place.



9. Next, the catch can 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. Cut the provided rubber hose in half. On a workbench, install one of the straight hose ends to one hose and the 90 degree hose end to the other hose. To assemble, simply lubricate the barbs of the push-lok hose ends. A drop of engine oil will suffice.

Using a hard surface push the hose downwards onto the push-lok barbs until the hose end 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.



12. Install and route the hoses as shown.

The 90 degree hose attaches to the 10AN fitting that connects to the OEM tubing. The straight hose attaches to the 10AN fitting that connects to the valve cover port.

Run both hoses through the slot and into the catch can compartment.



13. At the catch can, temporarily screw on each straight hose end.

Route the valve cover hose to the top catch can (inlet) port and cut to length. Route the crankcase tubing hose to the side catch can (outlet) port and cut to length.

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.



14. As shown, use the provided cable zip ties to secure the hoses together. Prior to closing the hood confirm there is adequate hood clearance.

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 the catch can every 5,000 miles (8,000km). Check more frequently for extreme use.

Catch can contents can be monitored using the dipstick. When collected fluid reaches a certain level, 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.

