

Oil Fill/Breather/PCV Holes For Small Block Chevrolet® Valve Covers by PML

Some engines require PCV, oil fill or breather holes in the valve covers and some do not. So PML designed these small block Chevy valve covers to fit the needs of a variety of applications.

If you want your valve covers to arrive with holes, you need to specify that when ordering.

This document describes the **most common set-up** for those requiring holes in our valve covers for PCV, breather, and oil fill. This configuration includes:

- Hole machined in each cover on intake manifold side (driver side front, passenger side rear)
- Grommet for PCV valve
- Breather (sits inside the PML valve cover baffle, pushes into cover)

The document applies to these PML small block Chevrolet valve covers, perimeter mount, part numbers:

- 8357-1
- 8357-2
- 8357-3
- 8357-6
- 8357-7
- 25th Anniversary

INFORMATION APPLIES TO ALL THE ABOVE PART NUMBERS, REGARDLESS OF THE VALVE COVER PICTURED.



This picture shows an example of a set of PML valve covers, machined.

The driver side front has the breather installed.

The passenger side rear is connected to the PCV.

Location of Holes

When PCV and breather holes are needed, holes are machined in the recessed location on the intake manifold side of the valve cover.

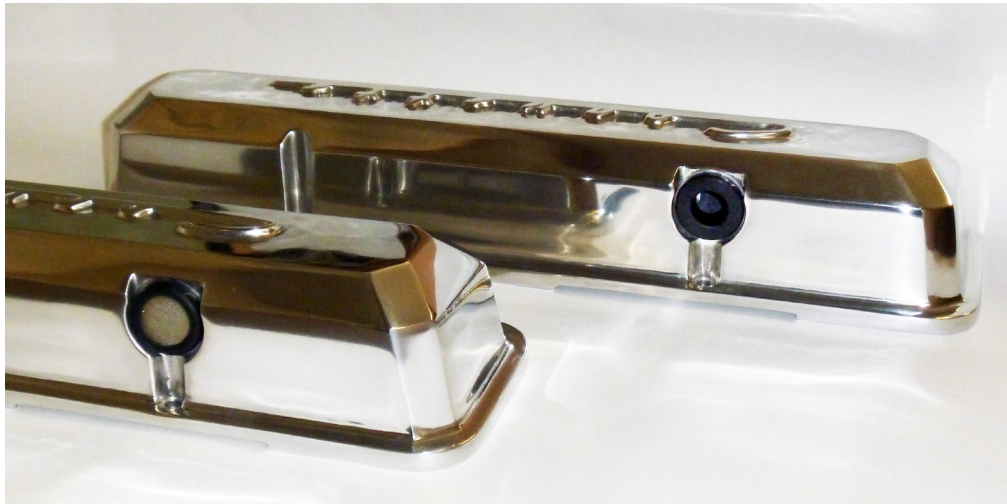
On the driver side of the engine, this recess will be above the mounting hole near the front of the engine.

On the passenger side, the recess will be near the firewall.

Picture of the recessed location on the intake manifold side of the cover:



Picture of valve covers with holes machined and a PCV grommet in the cover on the right and a breather in the cover on the left:



Below is a picture of the hole without a grommet or breather. The hole is spot faced and back faced so the grommet and breather fit securely.

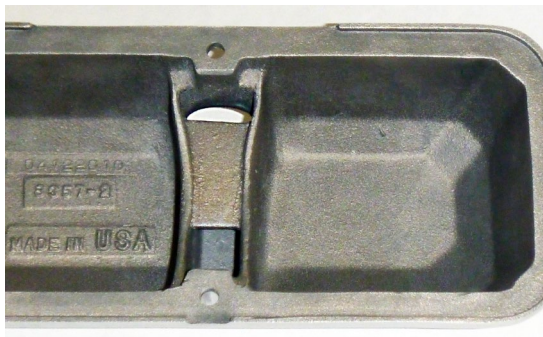


PML machines the holes for a clean appearance and a good fit to the grommet or breather. To achieve this, PML sets up on each cover and uses four different tools.

Corresponding to the recessed location, there are baffles on the inside of the valve covers.



When the PML supplied breather is installed, it sits inside the baffle.



This shows the inside of the cover after we have machined it for a PCV/breather hole.

Hole Size

PML machines holes to 1.22" in diameter to fit the breather and grommet. Holes are back-faced and spot-faced.

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Cost and Time

These machining operations are optional and carry an additional charge.

PML has a machine shop on-site and valve covers are machined to order.

It takes a few days.

PCV Grommet and Push-In Breather

Here are close-up images of the PCV grommet (left) and PML breather (right):



Specifications:

- PCV grommet inner diameter is $\frac{3}{4}$ " to fit PCV connectors.
- Breather is baffled on the inside.
- Breather is installed by pushing it into the cover and it sits in the baffled area.
- Breather foam piece can be removed for cleaning.
- Breather is flush with the side of the cover when installed.
- A separate, external breather is not used.

Oil Fill

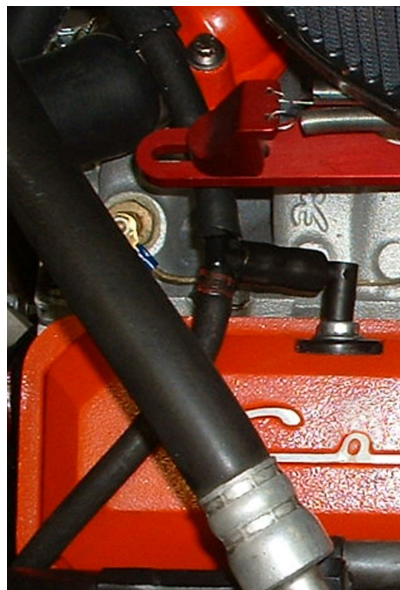
Oil fill can be done through the PCV or breather hole. A separate oil fill hole is not needed.

After removing the PCV valve, grommet or breather, use a funnel or flexible tube to add oil. This is an example of an oil fill tube:



Examples

Here are close-ups of the breather installed on driver side near the front and the PCV valve plumbed to a port on the carburetor on the passenger side near the firewall. An angled fitting in the passenger side valve cover connects a hose to the base of the carburetor.



This example is from a 1934 Ford Cabriolet with a small block Chevy engine. The PCV is on the passenger's side (near the firewall).

Other configurations are possible. Please give us a call or email us if you have questions or different needs, 800-335-4345 or yourcovers@pml.com.

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