



# Holden Colorado RG 2.8L Direction-Plus™ ProVent® 200 Installation Guide

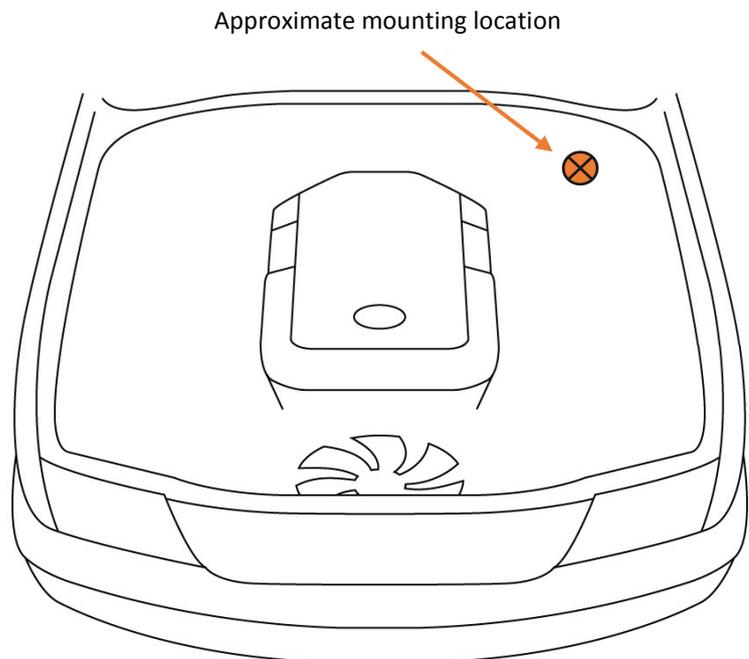
This document is to be used as a guide for the installation of the Direction-Plus™ Holden Colorado RG ProVent® 200 Crankcase Ventilation Kit to a 2012-2017 Holden Colorado RG Diesel with the 2.8L engine. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

## Important Before Starting

- Ensure you have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

## Included in the kit

- 1 x Mann + Hummel ProVent 200
- 1 x Mounting Bracket
- 1 x 500mm of 16mm Hose
- 1 x 650mm of 16mm Hose
- 2 x 75mm of 16mm Hose
- 1 x 16mm Straight Joiner
- 4 x 16mm 90° Joiners
- 10 x 16mm Spring Clamps
- 2 x 25mm Spring Clamps
- 2 x 16mm to 25mm Hose Coupler
- 8 x Cable Ties
- 1 x M6x16 Bolt
- 1 x M6 Flat Washer
- 2 x M8x25 Bolts
- 4 x M8 Flat Washers
- 2 x M8 Spring Washers
- 2 x M8 Nuts
- 1 x 1000mm of 12mm Hose
- 1 x Drain Tap Assembly
- 2 x 12-20mm Hose Clamps



\*Kit contents are subject to change based on component availability and/or refinement

## Installation Guide



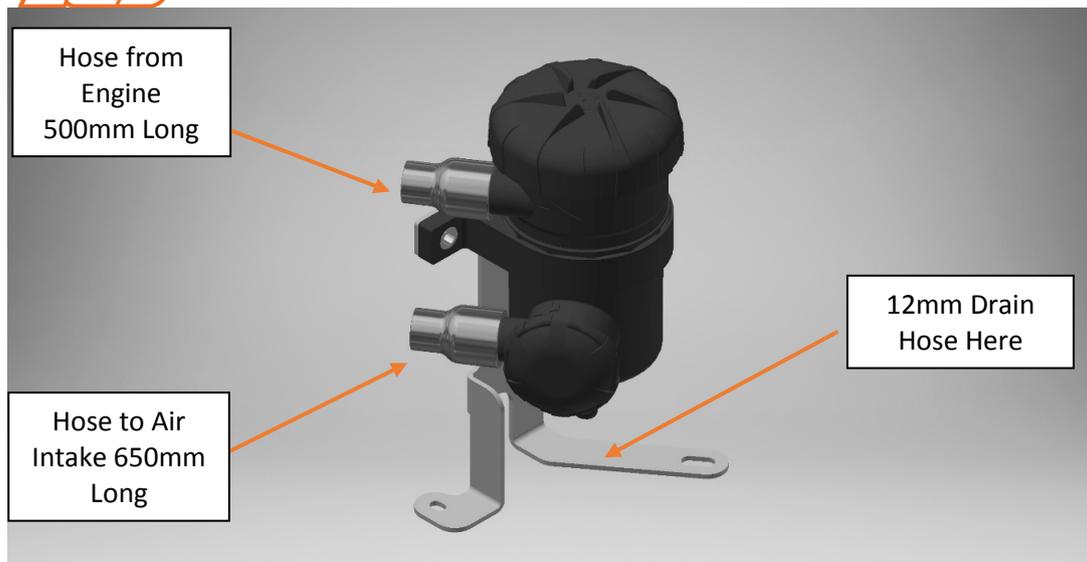
*Holden Colorado RG Engine Bay – Overall View*

1. Begin by removing the engine cover, you will need to remove the oil filler cap to allow this, once the cover is removed, replace the oil filler cap to avoid contamination. Bolt the new ProVent Bracket to the rear corner of the engine bay. It uses an existing M8 bolt (it needs to be removed, bracket fitted then reinstalled) and an M6 bolt, flat washer and spring washer into an empty factory threaded hole to secure it to factory mounting locations.
2. Connect the 12mm (1/2") Hose to the underside of the catch can body, using a 12-20mm Clamp to secure it in place.



*ProVent 200 with 12mm hose connected and secured with 12-20mm worm drive clamp*

3. With a flat washer on each of the M8x25mm bolts, mount the ProVent 200 to the mounting bracket. Use a flat washer, spring washer and nut to secure the bolts on the other side.



*Pre-assembled Provent 200 with bracket – Please note ProVent rotation in this image is correct, refer to the image on the last page of this installation guide for how to rotate the unit.*

4. Feed the 12mm Hose down the side of the engine bay, under the vehicle to an out of the way location, making sure it is clear of any suspension, driveline and exhaust components, fit the Tap hose tail into the hose.



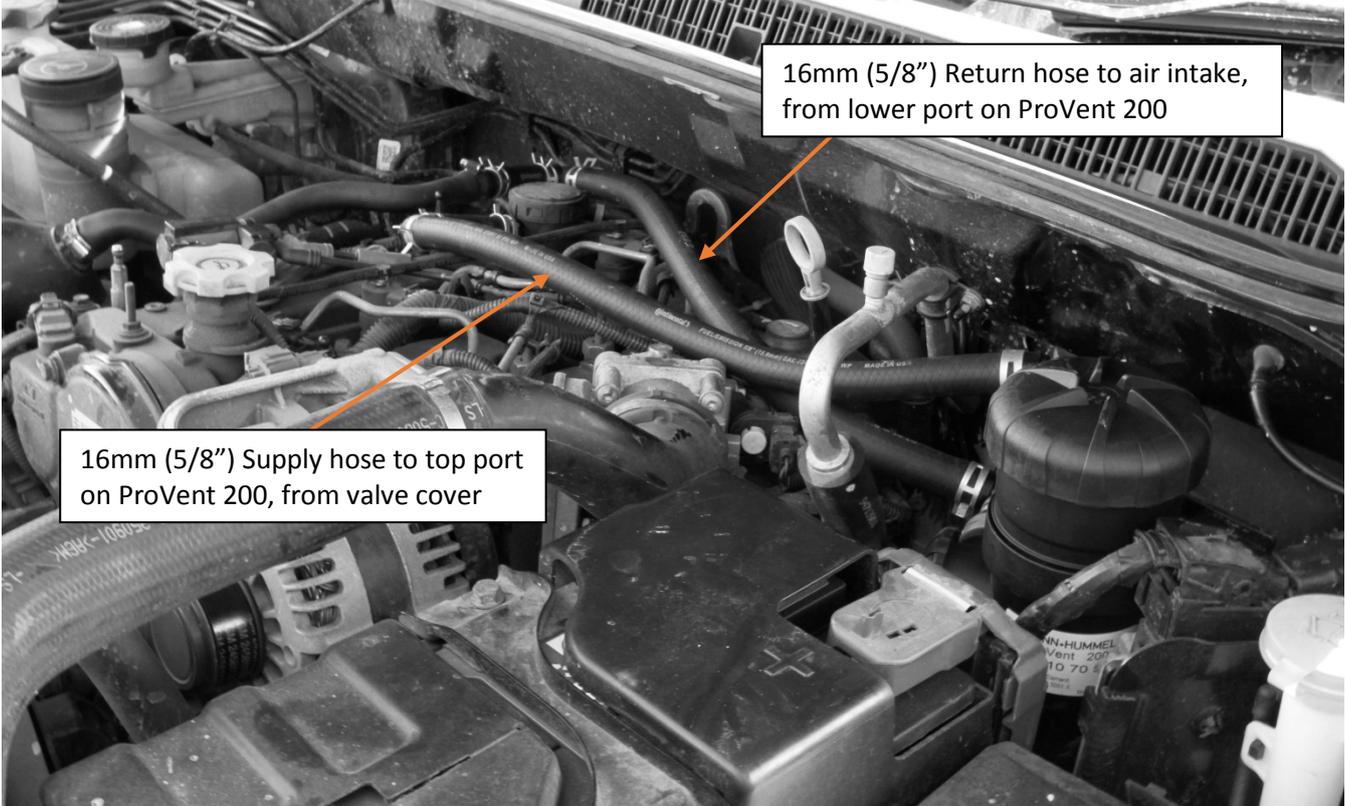
*Hose tail and tap assembly inserted into 12mm hose, hose clamp not required*

5. Use the supplied cable ties to secure the 12mm hose into the location required under the vehicle to prevent movement. Note: Leave a slight amount of slack in the line where the body and chassis join to prevent stretching the hose.
6. Make sure the tap position is closed and avoid placing the tap in a location in which it will fill with dirt and mud.



*Left image – Tap Open. Right image – Tap Closed.*

7. Remove the factory bypass elbow from the valve cover on the engine.
8. Mount one end of the first 75mm long 16mm (5/8") hose to the now vacant outlet on the valve cover of the engine. Secure in place with spring clamp. To the other end of this hose slide on a hose clamp then install a 90° Joiner.
9. To the other end of the 90° Joiner install the 500mm long 16mm (5/8") hose. Connect this hose to the upper 16mm (5/8") 90° joiner fitting on the ProVent 200. Secure in place with spring clamp.
10. Mount one end of the 650mm 16mm (5/8") hose to the lower 16mm (5/8") 90° joiner fitting on the ProVent 200. Secure in place with a hose clamp. To the other end of this hose slide on a hose clamp then install a 90° Joiner.
11. To the other end of the 90° Joiner install the second 75mm long 16mm (5/8") hose. Connect this hose to the 16mm (5/8") straight joiner fitting. Secure in place with spring clamp.
12. Using the 16mm straight joiner, run the hose to factory hose you disconnected earlier. Secure in place with hose clamps.





Hose configuration in Holden Colorado RG with ProVent 200 installed

### [End of Installation Guide](#)

#### ProVent 200

The housing can (prior to installation) be turned in the holder in 30° steps around the longitudinal axis.

This enables the position "Inlet and outlet fitting to flange" to be flexibly adjusted to the installation situation.

- Remove the retaining clip (1) upward from the groove and turn the holder into the desired position.
- Press the holder together somewhat in the desired position and engage the retaining clip in the groove again
- Mount the holder in the vertical position. Recommended tightening torque for M8 screws: 10 Nm.
- Ensure sufficient strength of the screw and nut material.
- Connect the hoses to the inlet, outlet and oil return fittings (make sure a sufficient length of hose is pushed on) and secure with hose clamps (see Chap.4.2 and 4.3).
- Connect the oil return hose (and non-return valve if necessary) to the oil sump.
- To ensure proper functioning, the ProVent should be protected against dirt (mount splash guards if necessary).

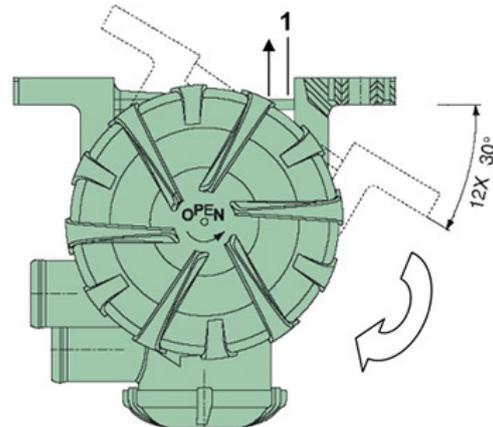


Fig. 5 Positions of outlet for ProVent 200

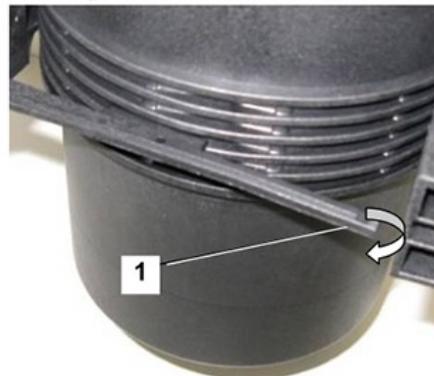


Fig. 6 Holder for ProVent 200