

# Volkswagen Amarok V6 Provent Ultimate Catch Can Installation Guide

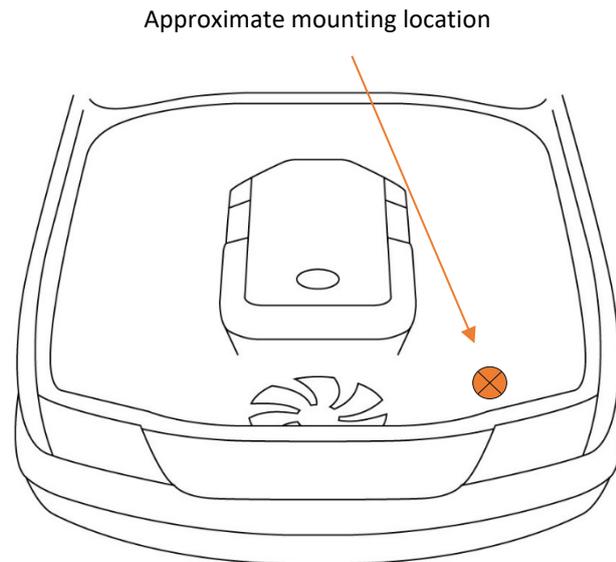
This document is to be used as a guide for the installation of the **Direction-Plus™ Provent Ultimate Catch Can Kit to a 2016+ Volkswagen Amarok V6 Diesel**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

## 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 170mm of 16mm hose  
1 x 1000mm of 16mm hose  
1 x 70mm of 16mm hose  
1 x 160mm of 16mm hose  
1 x 1100mm of 16mm hose  
5 x 16mm 90° Joiners  
12 x 16mm Spring Clamps  
2 x 25mm Spring Clamps  
2 x 16mm to 25mm Hose Coupler  
8 x Cable Ties  
1 x M6x12 Bolt  
1 x M6 Spring Washer  
1 x M6 Flat Washer  
1 x M6 Nyloc Nut  
2 x M8x25 Bolts  
2 x M8 Flat Washers  
1 x 1000mm of 12mm Hose  
1x Drain Tap Assembly  
2 x 12-20mm Hose Clamps



## Installation Guide

1. Begin by removing the engine cover to give access to the crankcase bypass hose in the rear driver's side corner. It is just a push fit on 4 locating tabs.

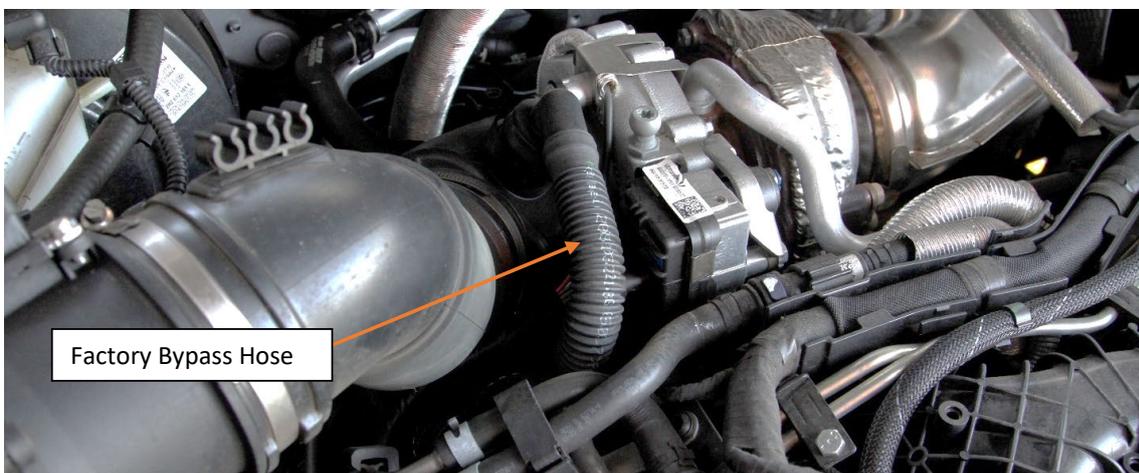


*Amarok V6 Engine Bay – Overall View*

2. Locate the factory bypass hose which runs from the air intake piping down to the valve cover on the driver's side of the engine. The hose is only about 150mm in length and shaped like an "L". Once located, this hose needs to be removed from the vehicle. It removes by pushing in on the tabs of the connector and pulling up. Remove the quick release fittings from the factory bypass hose, these fittings need to be reused.

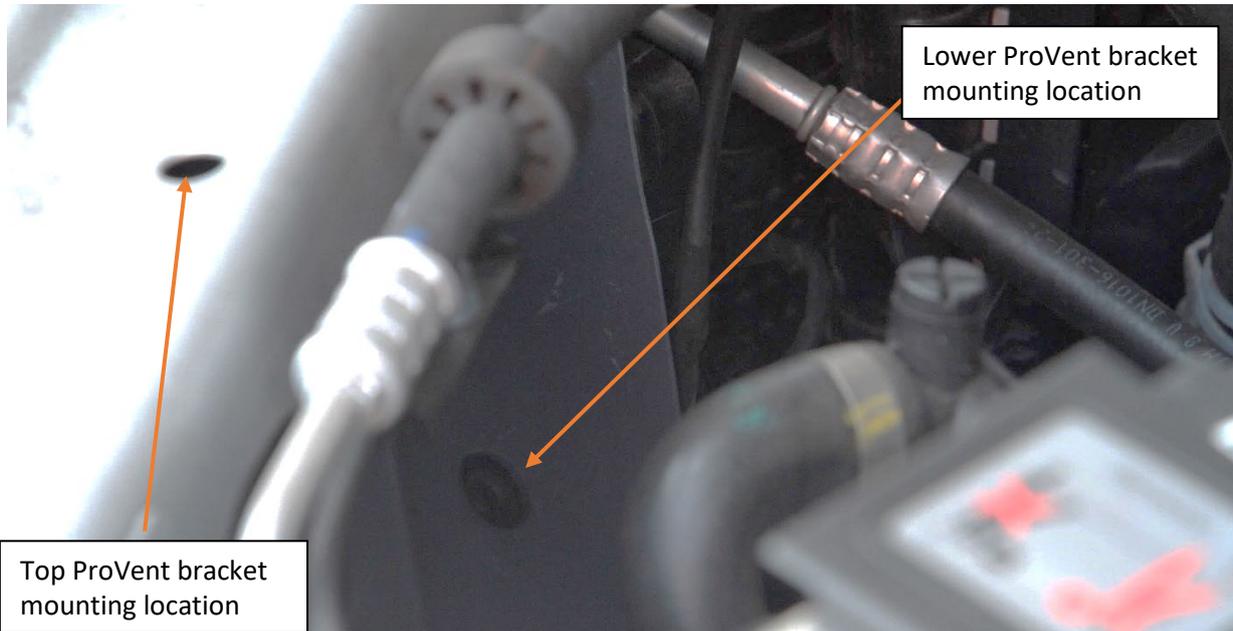


*Factory bypass hose, complete and with fittings removed, use a heat gun or hot water to soften the plastic hose and the fittings will pop out.*



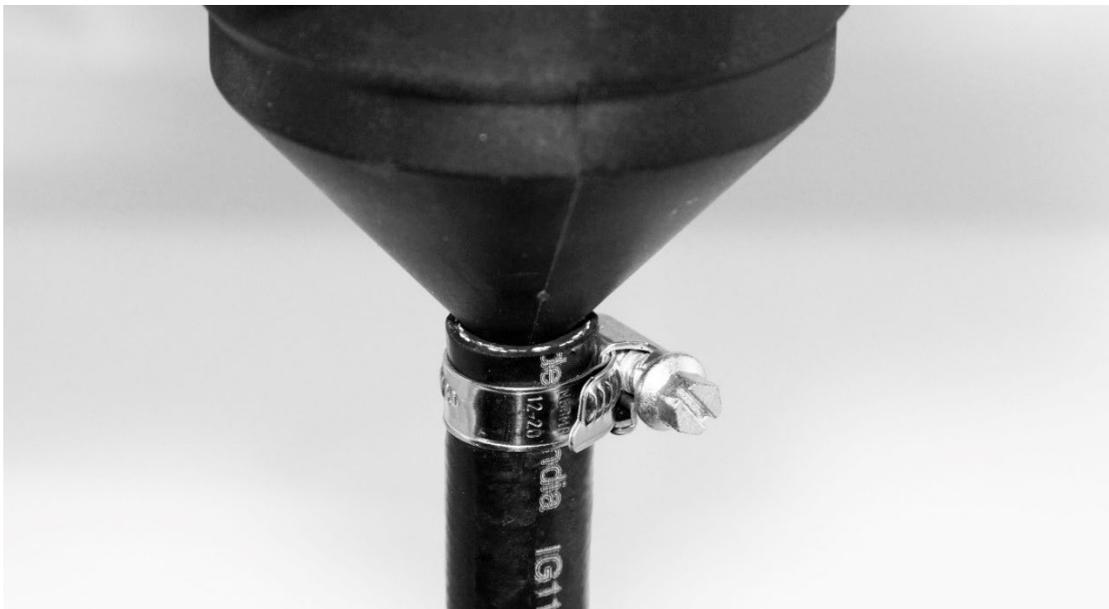
3. Locate torx bolt behind the passenger headlight which points towards the radiator. Once removed, bolt in the new bracket supplied in the kit. The bracket uses the 6mm hole in the radiator support panel to secure

and locate the top of the new bracket in place. Once the bracket is aligned correctly, tighten mounting bolts in place.



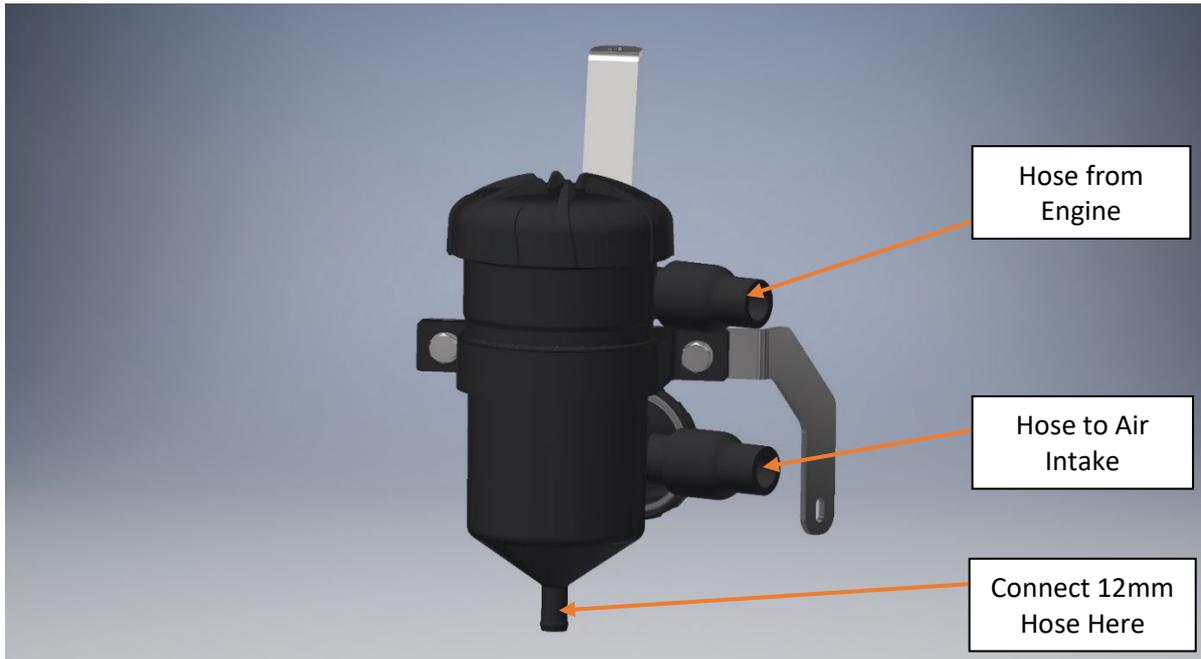
*View behind passenger side headlight: image shows new ProVent mounting bracket location*

4. Connect the 12mm (1/2") drain hose to the underside of the catch can body, using a 18-20mm clamp to secure it in place.



*Provent 200 with 12mm drain hose connected and secured with a clamp*

5. Install the 25-16mm reducers onto the 25mm ports on the ProVent 200. Use the two larger spring clamps to secure in place.
6. 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. You may need to unbolt the bracket on the inner guard to allow for enough space to squeeze the ProVent past. It does fit though and make sure to bolt in back down if you do remove it for fitment after the ProVent 200 is installed.



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.

7. 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 and secure with an 18-20mm clamp.



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

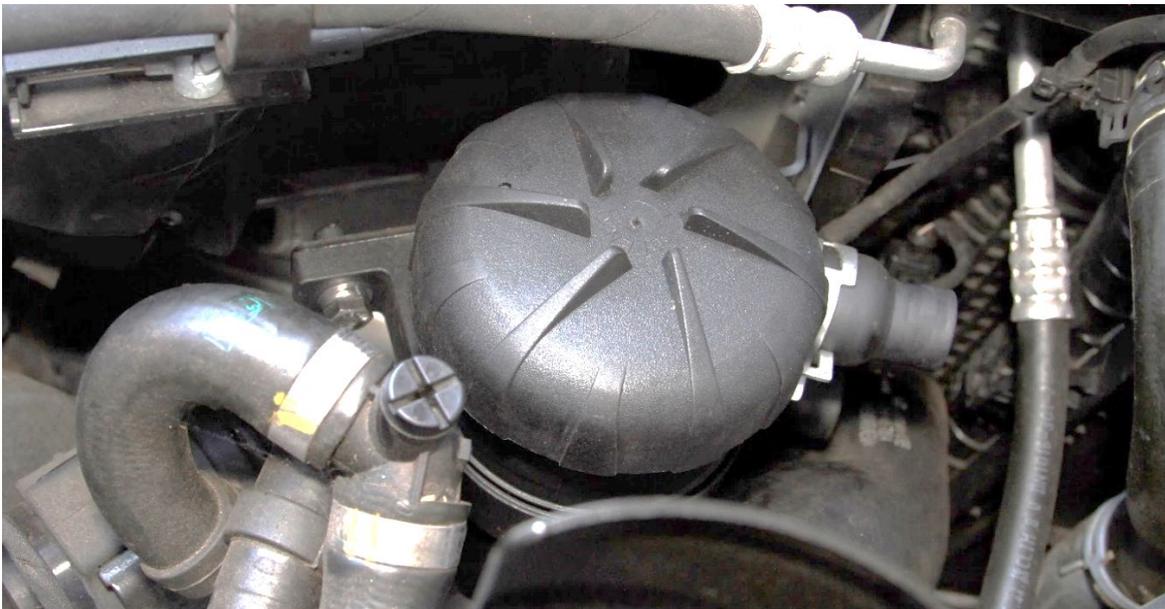
8. Use the supplied cable ties to secure the 12mm hose into the location required under the vehicle to prevent movement. Note: Leave a slight amount of slack in the line where the body and chassis join to prevent stretching the hose.
9. Make sure the tap position is closed and avoid placing the tap in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



*Left image – Tap Open.*

*Right image – Tap Closed*

10. Insert a 90° elbow into each of the reducing couplers, securing with a spring clamp. The elbows should be facing up. To the lower hose, connect the 170mm long piece of 16mm hose, use a spring clamp to secure it in place. To the other end of this hose insert another 90° elbow and secure with a spring clamp. The elbow should face towards the radiator.
11. Connect the 1000mm length of 16mm hose to the outlet of the 90° fitting you just installed. This is the return line to the air intake piping. To the end of this hose connect the original fitting from the air intake piping side of the factory bypass hose that you removed earlier. You will need to heat and lubricate the end of the hose to stretch it over the larger fitting size. Secure in place with a spring clamp.

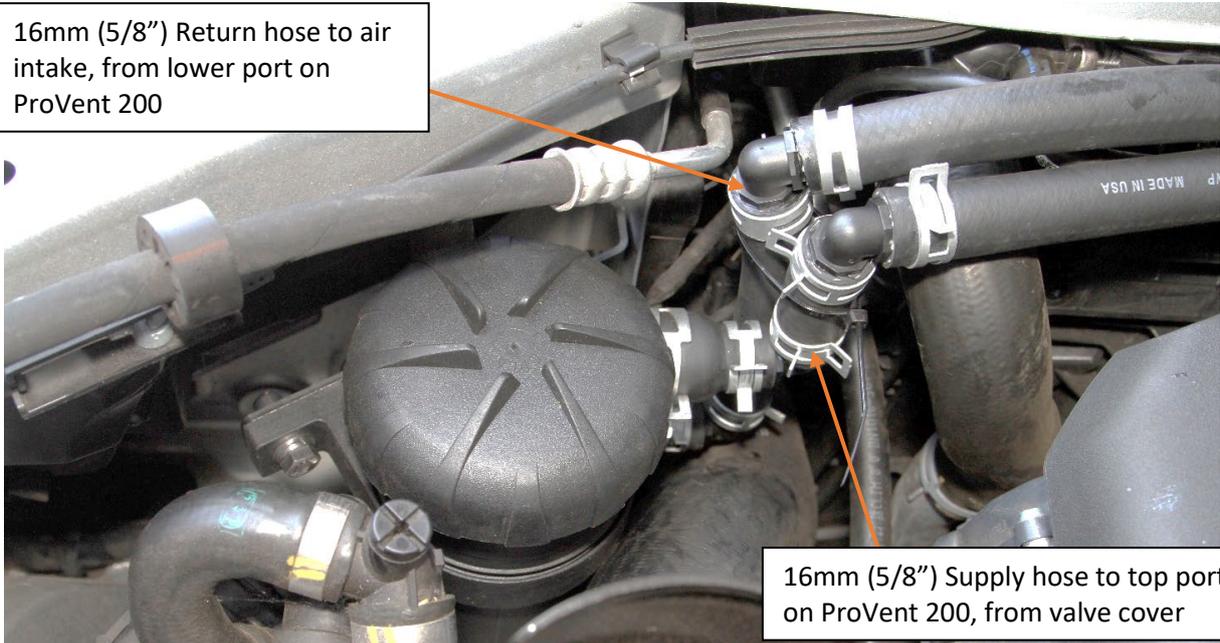


*ProVent 200 bolted in place on bracket and in correct rotation. Note the reducing couplers are already installed along with clamps in this picture.*

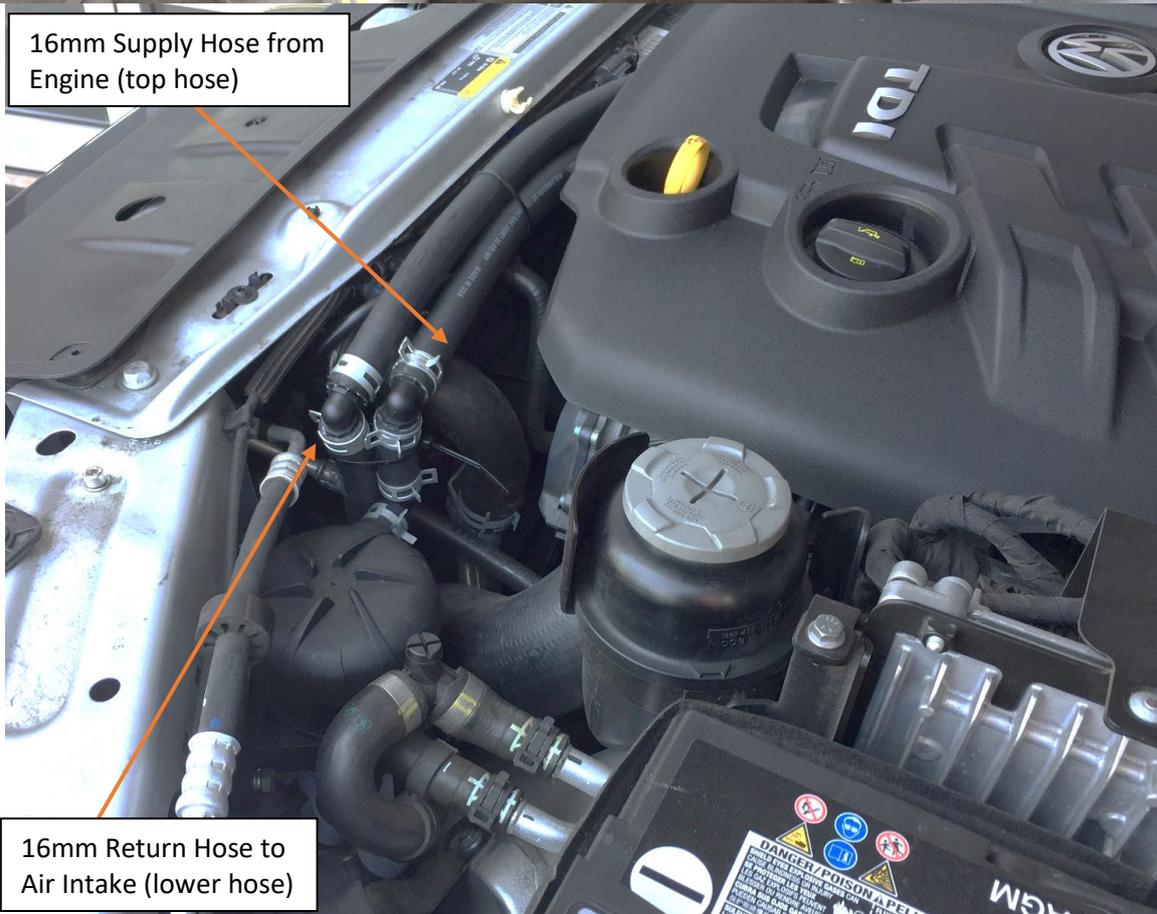
12. Mount one end of the 70mm 16mm (5/8") hose to the upper 16mm (5/8") 90° elbow fitting on the ProVent 200. Secure in place with a spring clamp. To the other end of this hose insert another 90° elbow and secure with a spring clamp. The elbow should face towards the radiator.
13. Connect the 1100mm length of 16mm hose to the outlet of the 90° fitting you just installed. This is the supply line from the valve cover. To the end of this hose connect another 90° fitting and then the 160mm length of hose. Secure in place with spring clamps. To the opposite side of the 160mm hose connect the original fitting from the valve cover side of the factory bypass hose that you removed earlier. You will need

to heat and lubricate the end of the hose to stretch it over the larger fitting size. Secure in place with a spring clamp.

16mm (5/8") Return hose to air intake, from lower port on ProVent 200



16mm Supply Hose from Engine (top hose)



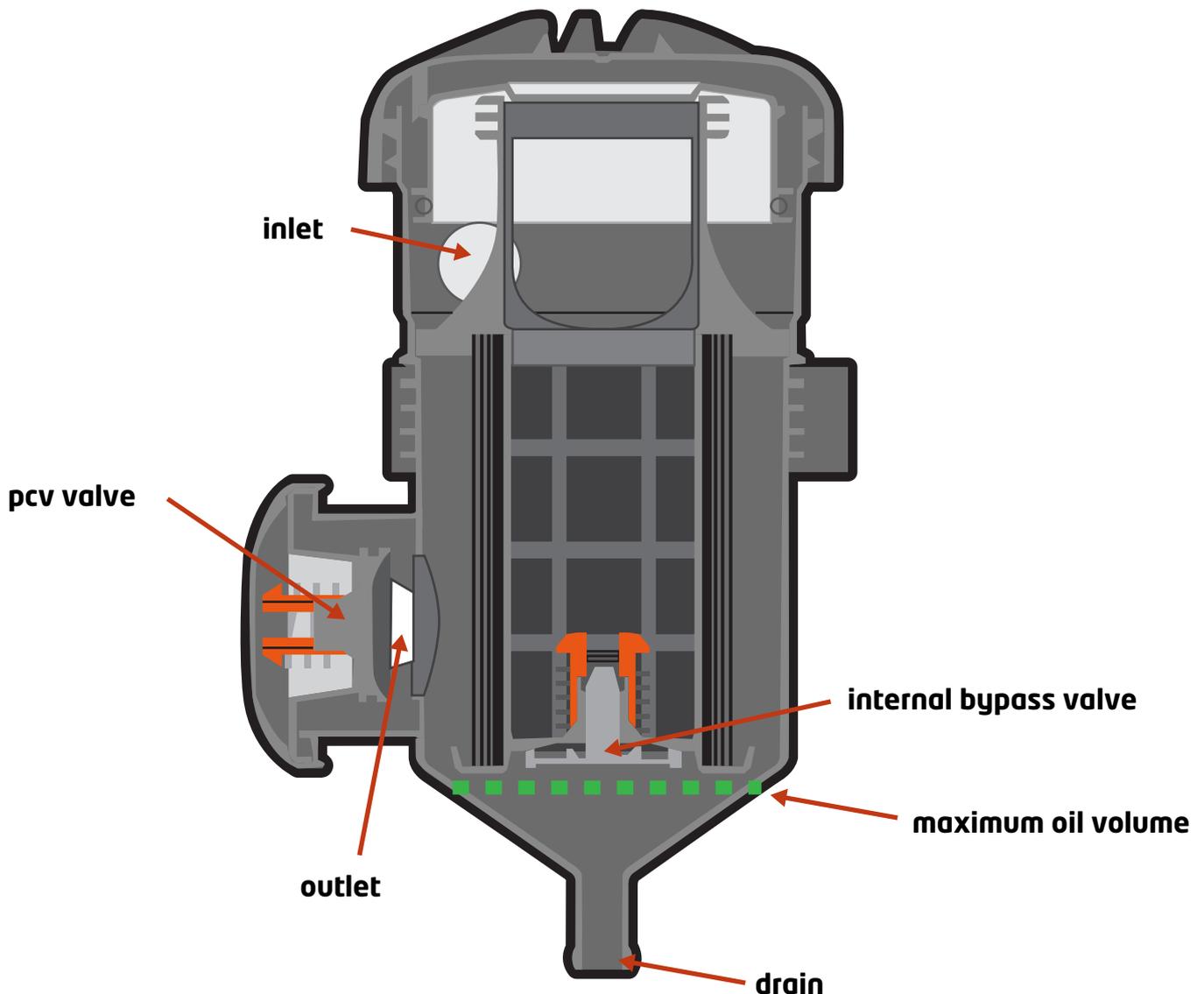
*Hose configuration in Amarok V6 with ProVent 200 installed – Note, the hoses need to be run above the radiator fan and then under the engine cover, the hoses are long enough to allow for this, just make sure to keep clear of the radiator fan and the vent flaps in the radiator shroud!!*



*Finished installation with engine cover reinstalled*

## **End of Installation Guide**

## **PV200 INTERNAL BYPASS VALVE SECTIONAL DIAGRAM**



Due to the way the internally vented PV200 works, the PV200 must be drained regularly to ensure correct operation of the internal bypass valve. Failure to regularly draining/servicing the Catch Can may cause engine damage due to over pressurisation of the crankcase ventilation system.

The ■ ■ ■ in the diagram indicates the maximum permissible oil level. For the PV200 internal bypass valve to correctly operate the internal oil volume **MUST NOT** exceed the level indicated by the ■ ■ ■ shown in the diagram.

If the internal oil volume is to exceed the level indicated by the ■ ■ ■ shown in the diagram, the internal bypass valve cannot operate as designed due to it being submerged. This condition is likely to cause over pressurisation of the crankcase ventilation system and damaging the engine.

**WARNING:** Colder climates can cause increased condensation inside the Catch Can. This will fill the reservoir quicker than oil and will need to be drained regularly. Failure to do so could & can damaged the Catch Can or vehicle.

### 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).

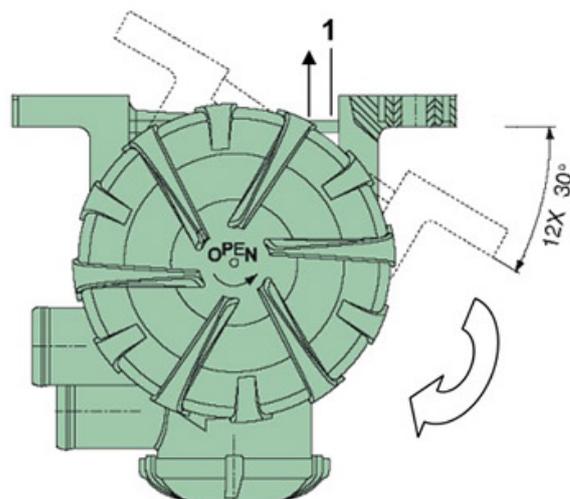


Fig. 5 Positions of outlet for ProVent 200

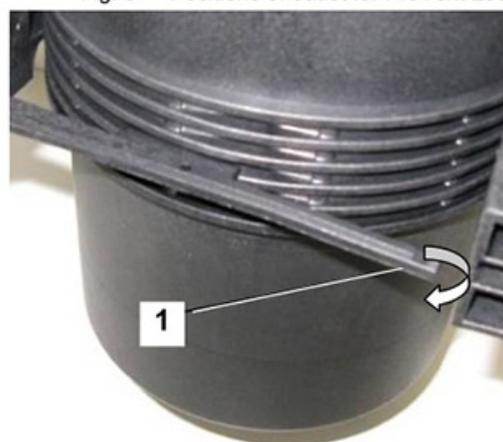


Fig. 6 Holder for ProVent 200