Nissan Navara D40 Direction-Plus™ ProVent® Ultimate Catch Can Installation Guide

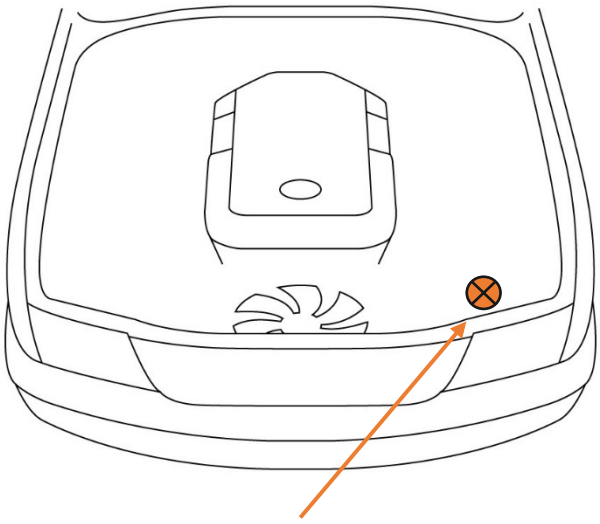
This document is to be used as a guide for the installation of the **Direction-Plus™ ProVent® Ultimate Catch Can Kit to a 2008-2015 Nissan Navara D40 2.5L 4-cylinder diesel.** It is recommended that the installation of the product be carried out by a competent qualified mechanic.

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

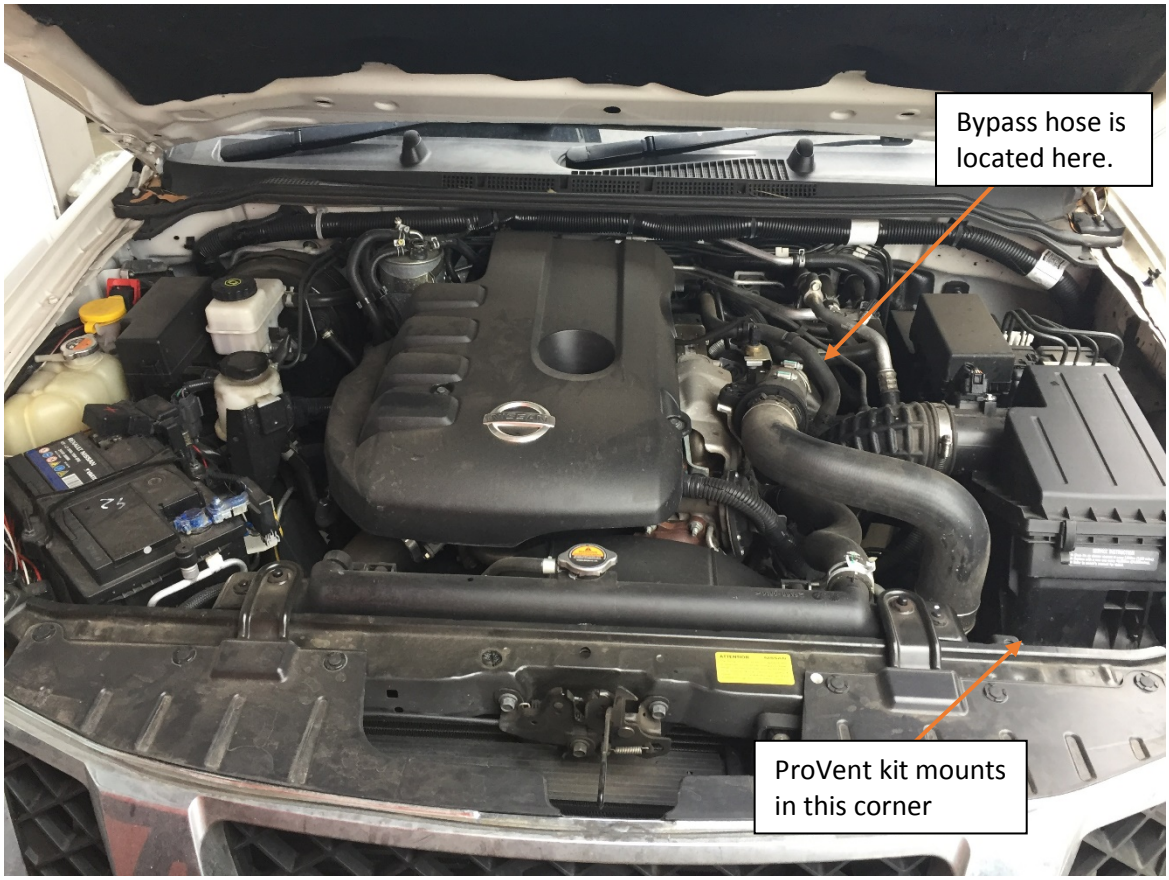
1 x Mann + Hummel ProVent® 200
1 x Mounting Bracket
1 x 550mm of 16mm Hose
1 x 400mm of 16mm Hose
1 x 65mm of 16mm Hose
1 x 16mm 90˚Joiner
3 x 16mm Straight Joiner
8 x 16mm Spring Clamps
2 x 25mm Spring Clamps
2 x 16mm to 25mm Hose Coupler
8 x Cable Ties
2 x M6 x16 Bolts
2 x M6 Nyloc Nuts
4 x M6 Flat Washers
2 x M8x25 Bolts
2 x M8 Flat Washers
2 x M8 Spring Washers
1 x 1000mm of 12mm Hose
1x Drain Tap Assembly
2 x 12-20mm Hose Clamps



Approximate mounting location

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

Installation Guide



Nissan Navara D40 Engine Bay – Overall View

1. Begin by locating the factory bypass hose which runs from the valve cover on the passenger's side to the intake pipe in front of it. The hose is only about 400mm in length and has a few bends in it. Once located, this hose needs to be removed from the intake pipe.

2. Bolt the mounting bracket in place in the engine bay in front of the airbox using the two M6 bolts, flat washers and nyloc nuts.

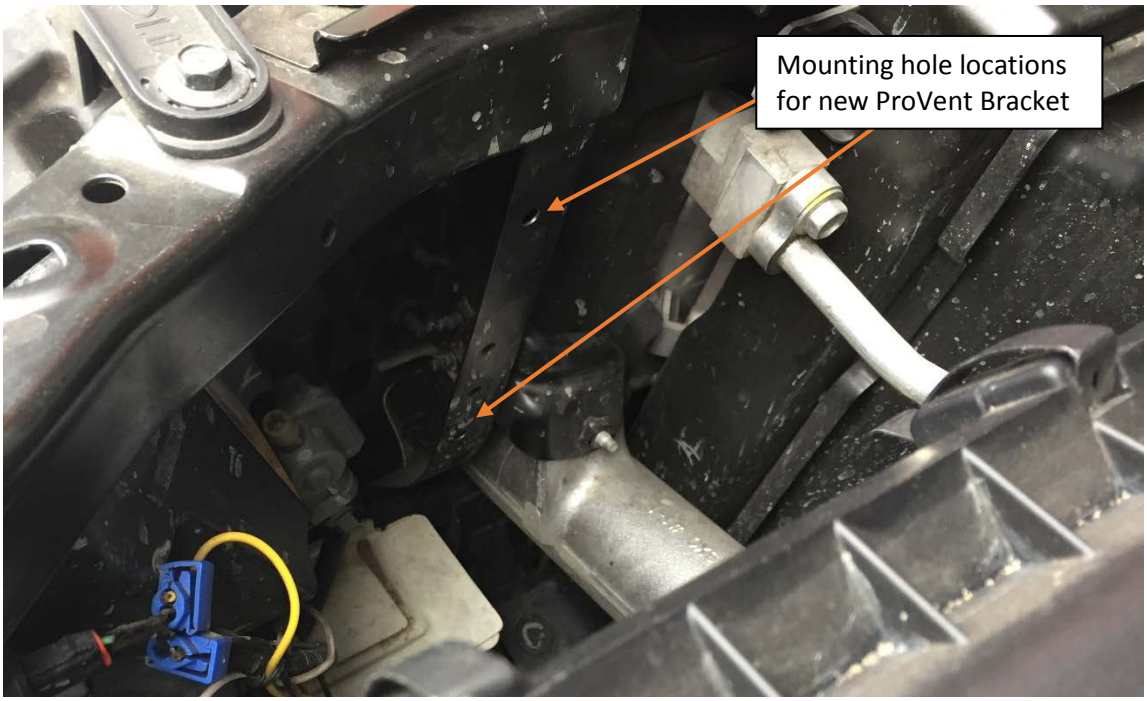


Image shows new ProVent bracket location behind passenger headlight

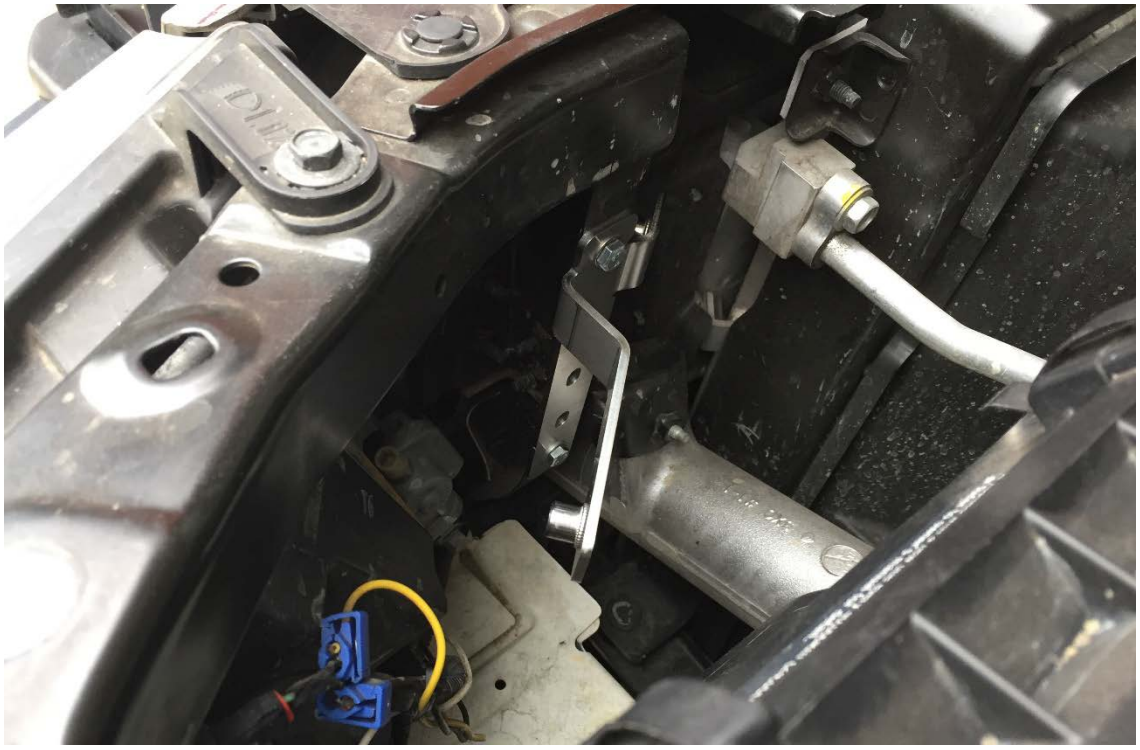


Image shows new ProVent bracket bolted in place behind passenger headlight

3. Connect the 12mm (1/2”) Hose to the underside of the catch can body, using a clamp to secure it in place.

ProVent® 200 with 12mm hose connected and secured with 12-20mm spring clamp

4. With a flat washer and spring washer on each of the M8x25mm bolts, mount the ProVent 200 to the mounting bracket.

ProVent 200 bolted in place, please not fittings are exiting 90° from the bracket, please refer to the image on the last page of this installation guide for how to rotate the ProVent in its bracket.

5. 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 a 12-20mm clamp.

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

6. 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.

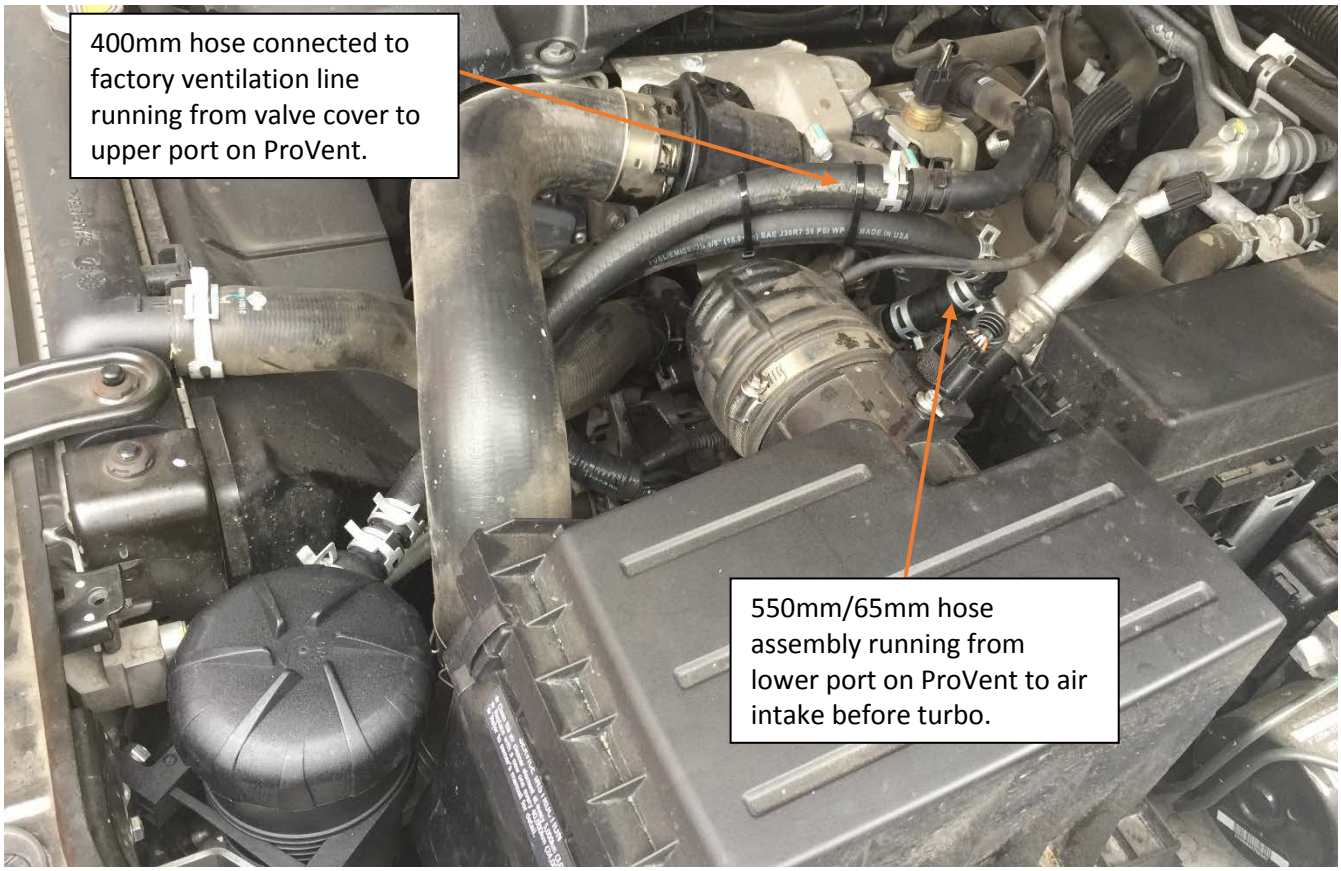
7. Make sure the tap position is closed and avoid placing the tap in a location in which it will fill with dirt and mud.

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

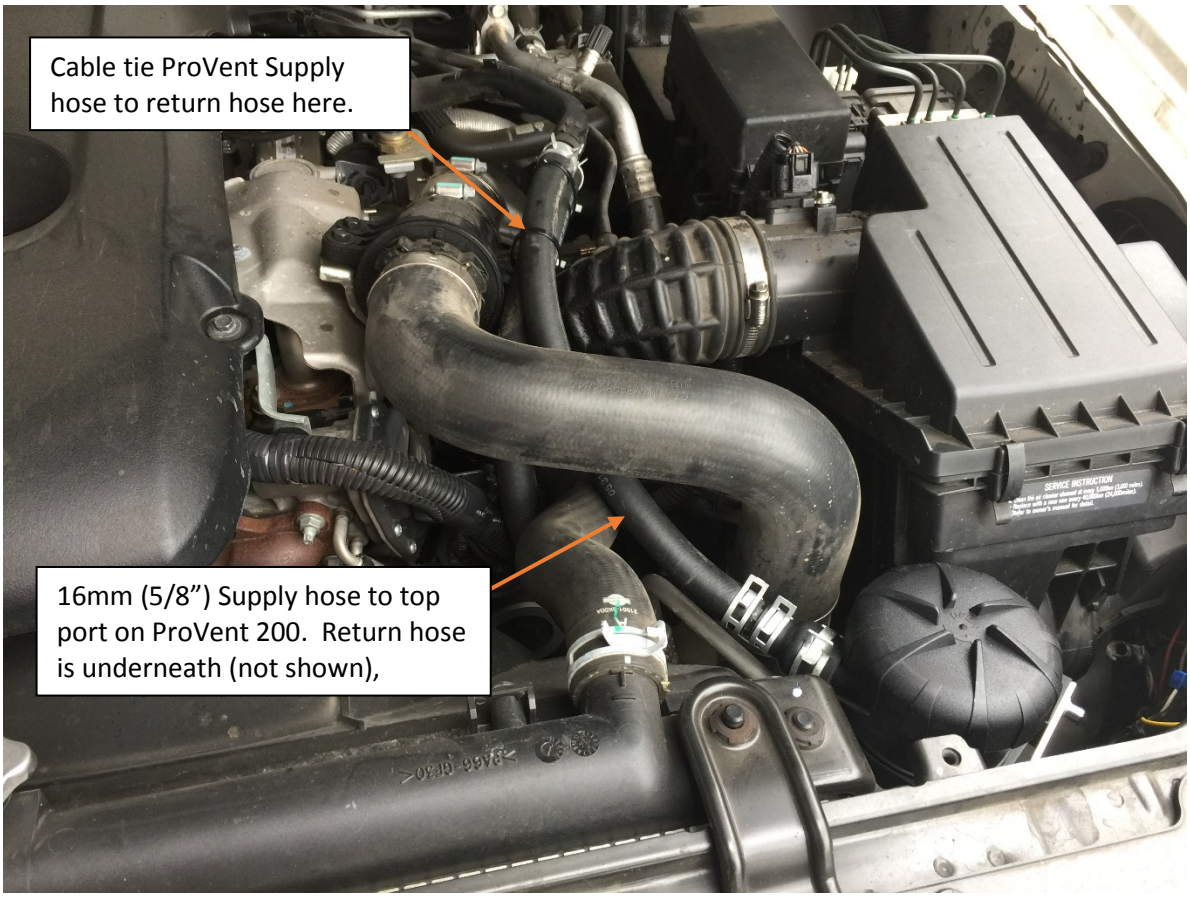
8. Install the 25-16mm reducers onto the side ports on the ProVent 200, secure in place with 25mm spring clamps.

9. Install the 65mm long 16mm hose to the empty port on the intake pipe from which you disconnected the hose from earlier. Secure in place with a 16mm spring clamp. To the other end push in the 16mm elbow and again secure in place with a 16mm spring clamp. To the other end of this 90 ˚ joiner, connect the 550mm length of 16mm hose and secure with a clamp. This hose joins to the lower port on the ProVent with the use of a 16mm straight joiner and 16mm clamps.

10. The 400mm length of 16mm hose connects to the factory ventilation line with a 16mm straight joiner and secures in place with a clamp. Connect the other end to the top port on the ProVent with the use of a 16mm straight joiner and 16mm clamps.



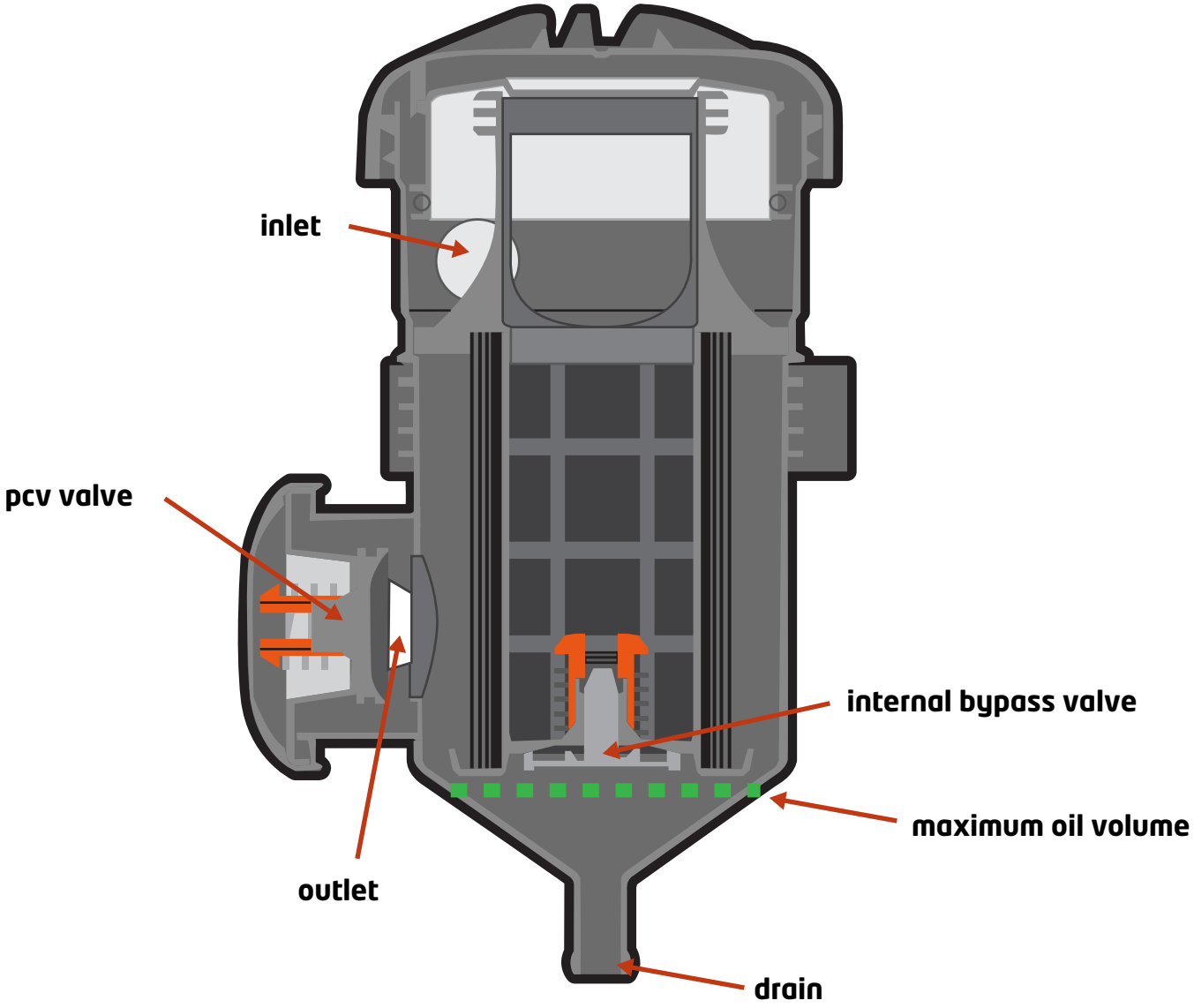
Hose configuration in D40 Navara with ProVent® 200 installed.



Hose configuration in D40 Navara with ProVent 200 installed.

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).

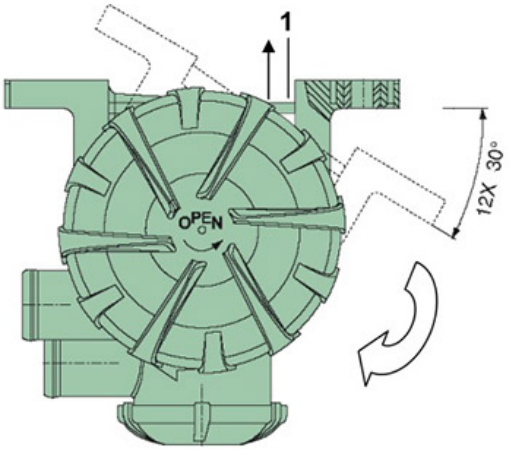


Fig. 5 Positions of outlet for ProVent 200

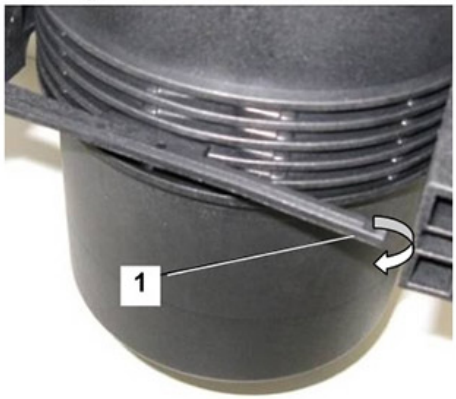


Fig. 6 Holder for ProVent 200