ProVent Catch Can Kit Installation Guide

for Great Wall Cannon 2.0L

This document is to be used as a guide for the installation of the Direction Plus Provent Catch Can Kit to a 2019-2024 Great Wall Cannon 2.0L Diesel. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

Included in the kit

Loose in Box	*Bagged*	*ProVent Fitting Kit Bag*
1 x Mann + Hummel ProVent 200 (PV200DP)	1 x 16mm 90˚Joiners (DPC9016)	2 x M8x25 Bolts (SSSS304M825)
1 x Mounting Bracket (PV655-BR)	3 x 16mm 45 ˚Joiners (DPC4516)	2 x M8 Flat Washers (FMW8)
1500mm of 16mm Hose (DPPH16)	6 x 25mm Spring Clamps (DPSC25)	2 x M8 Spring Washers (FWSW8)
	2 x 32mm Spring Clamps (DPSC25)	
	2 x 16mm to 25mm Hose Coupler (PV2516DP)	
	8 x Cable Ties (802078)	*ProVent Drain Kit Bag*
		1 x 1000mm of 12mm Hose (DPFH12-GAT)
		1 x Drain Tap Assembly (DPDRAIN)
		2 x Hose Clamps (DPSC16)

Important before starting

- Ensure the engine bay is clean and free from contaminants
- The filter head has direction arrows indicating the direction of flow
- You have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation before commencing any work

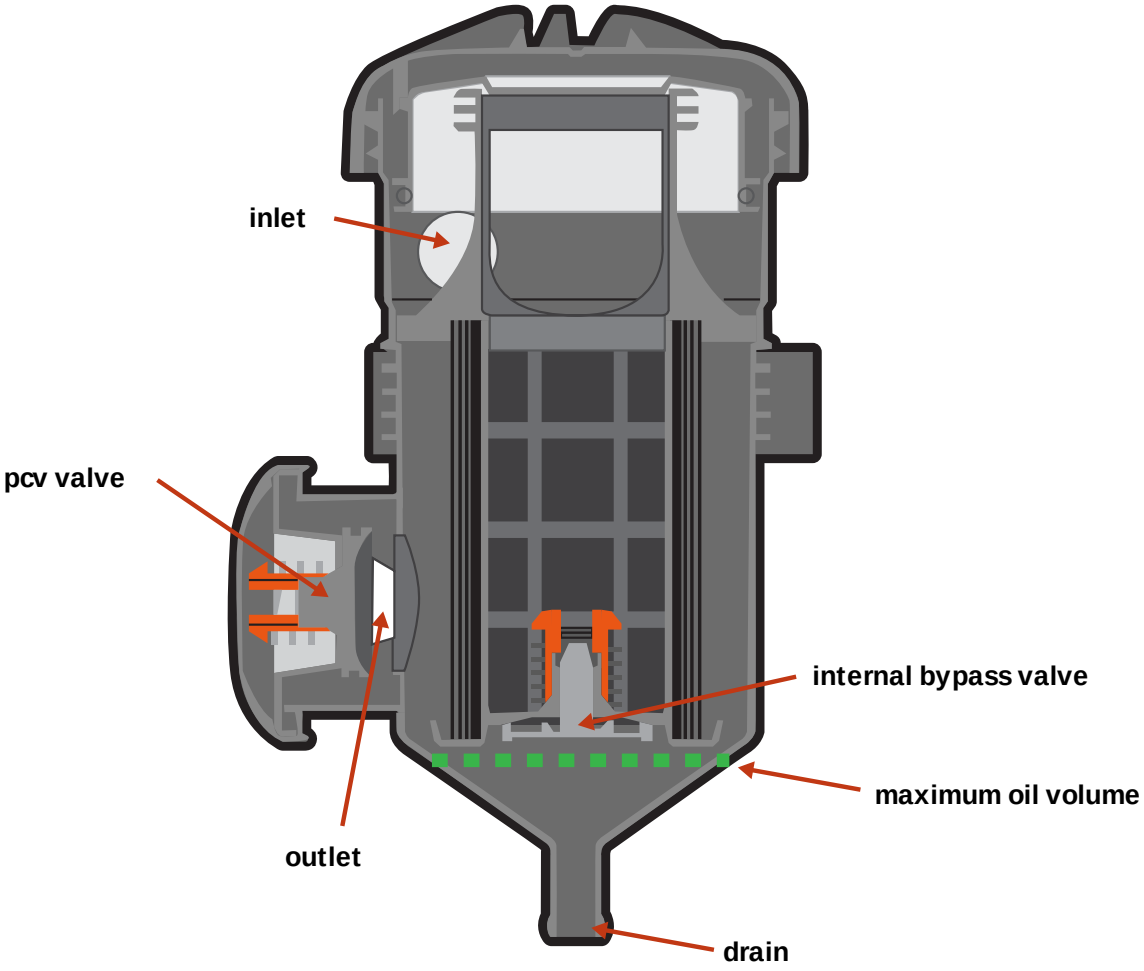
Maintenance / Servicing

- Provent Catch Can MUST be drained every 3,000 – 5,000kms. Failure to do this can result in engine damage.
  Provent Catch Can filter element is to be replaced every 30,000 - 40,000km or as per your vehicles service

Basic Tools Required:

- Spanners
- Sockets
- Screw drivers
- Pliers
- Snips/Cutters
- Rags

PV200 INTERNAL BYPASS VALVE SECTIONAL DIAGRAM



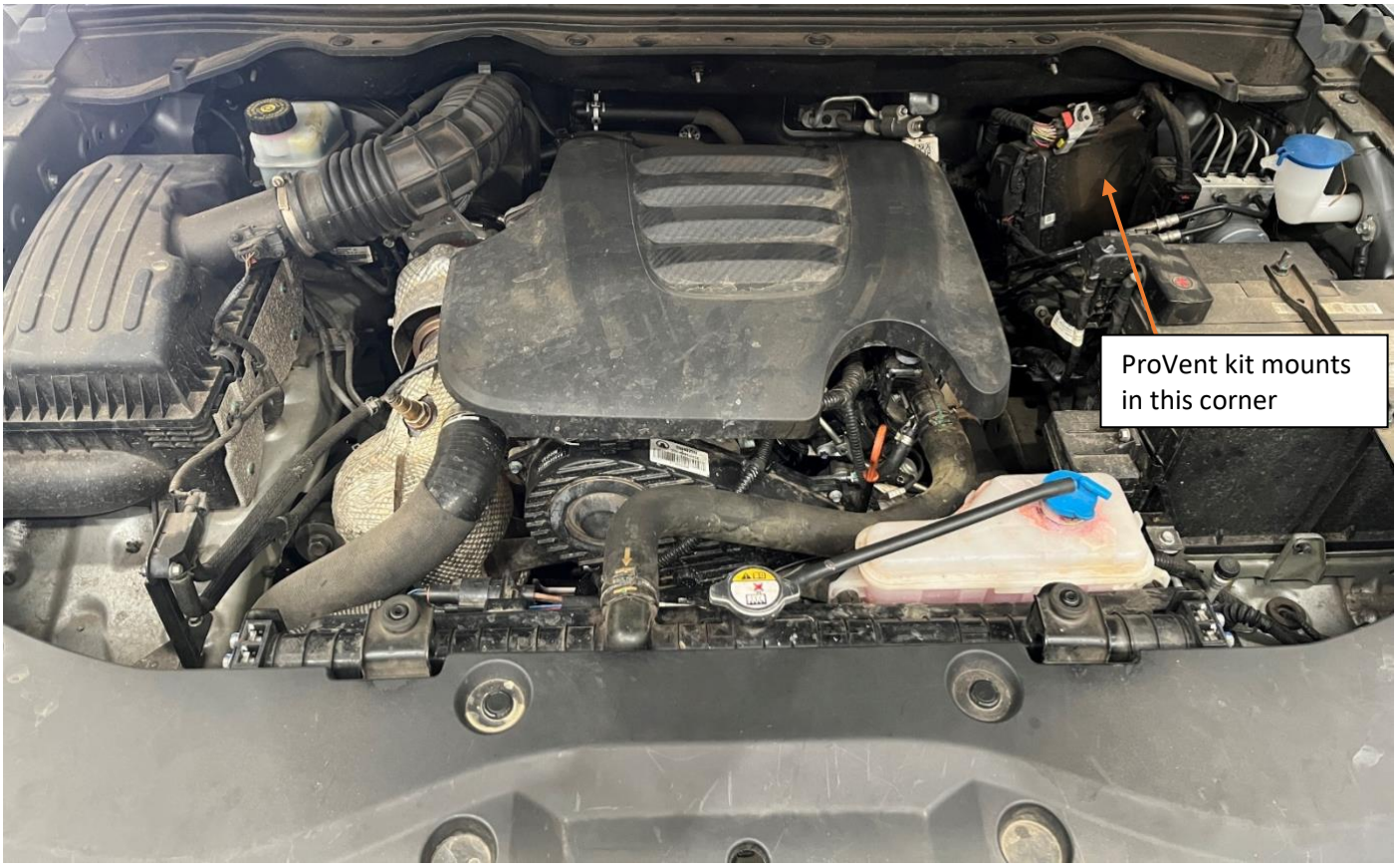
Due to the way the internally vented PV200 works, the PV200 must be drained regularly to ensure correct operation of the internal bypass valve. Failure to regularly draining/ servicing the Catch Can may cause engine damage due to over pressurisation of the crankcase ventilation system.

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.

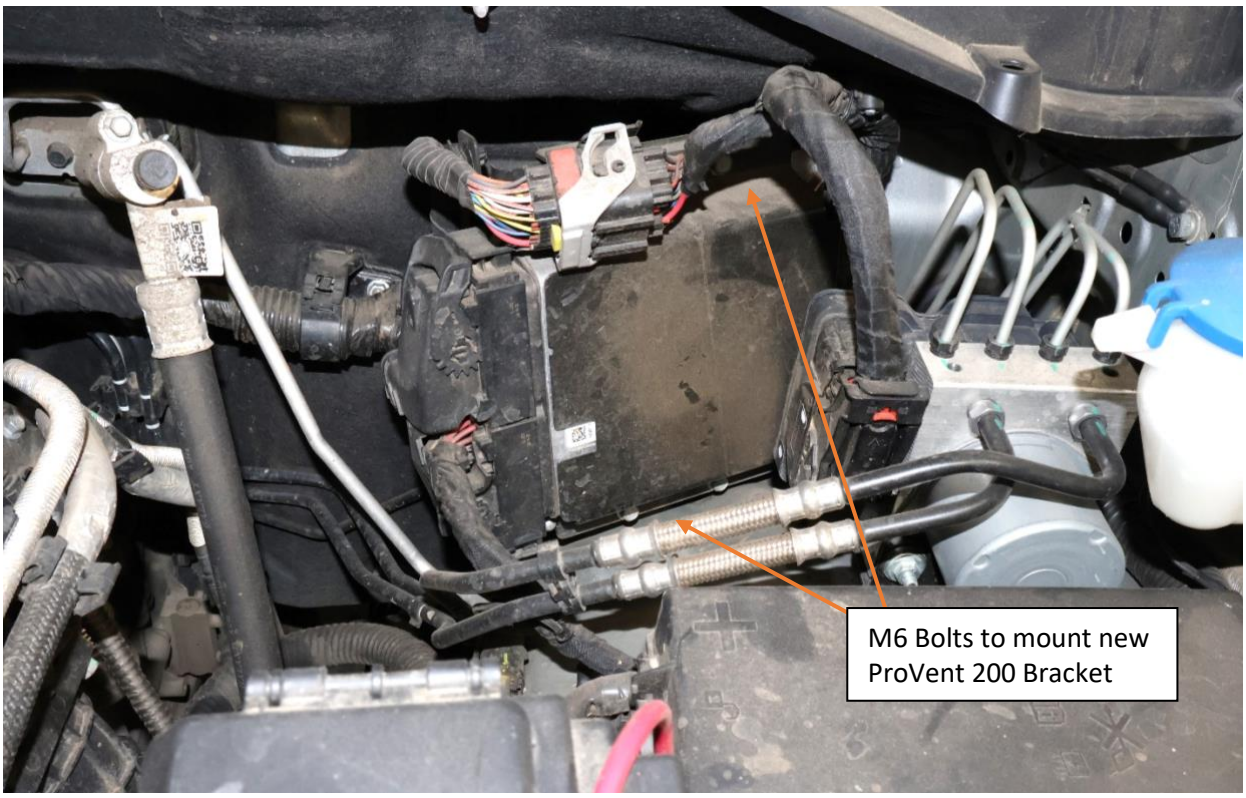
WARNING: Colder climates can cause increased condensation inside the Catch Can. This will fill the reservoir quicker than oil and will need to be drained regularly. Failure to do so could & can damaged the Catch Can or vehicle.

Installation Guide



Great Wall Cannon Engine Bay Layout

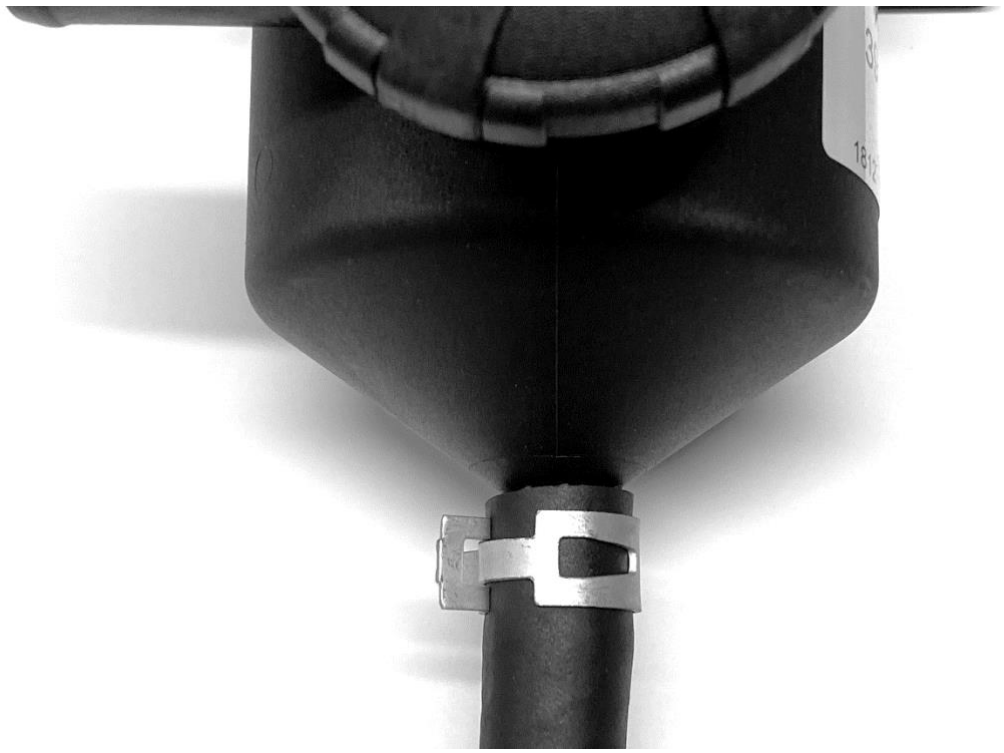
1. Begin by removing the two bolts that hold the ECU to the factory bracket. Retain bolts to be reused to fit the new ProVent bracket.
2. Remove the engine cover by pulling up, it locates with rubber grommets on the cover to 4 ball sockets on the engine.



Great Wall Cannon Engine Bay ProVent Mounting Location

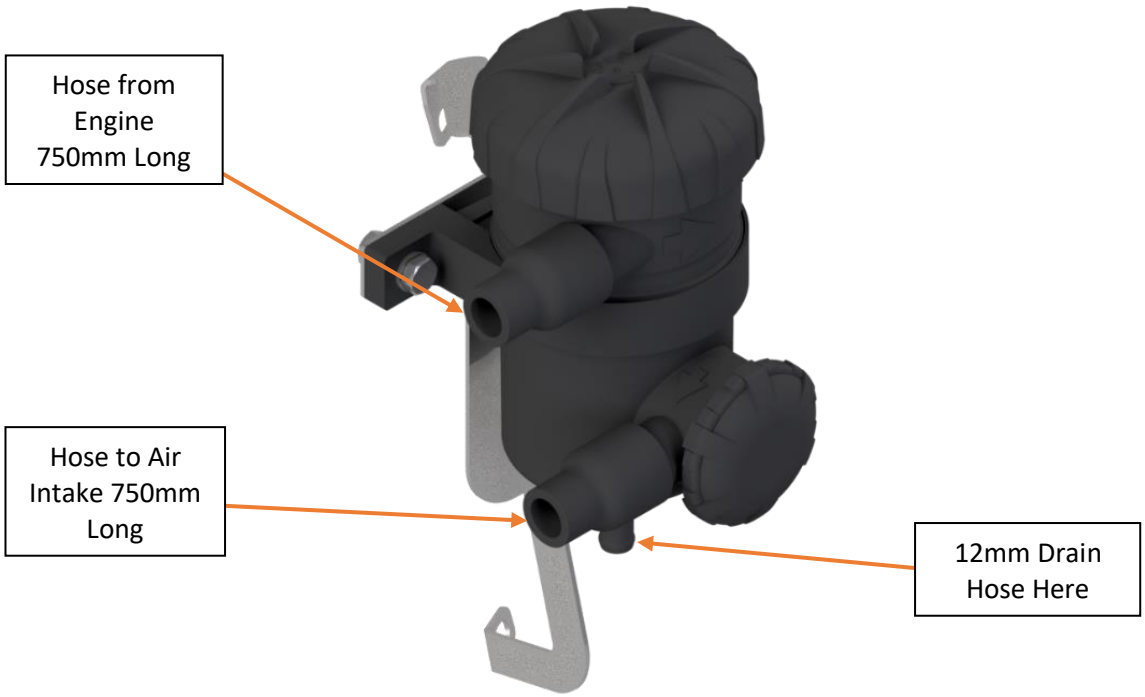
Great Wall Cannon Engine Bay ProVent Bracket Mounted in Place

3. Bolt the new ProVent bracket in place reusing the original bolts.
4. Connect the 12mm (1/2”) Hose to the underside of the catch can body, using a 12-20mm Clamp to secure it in place.



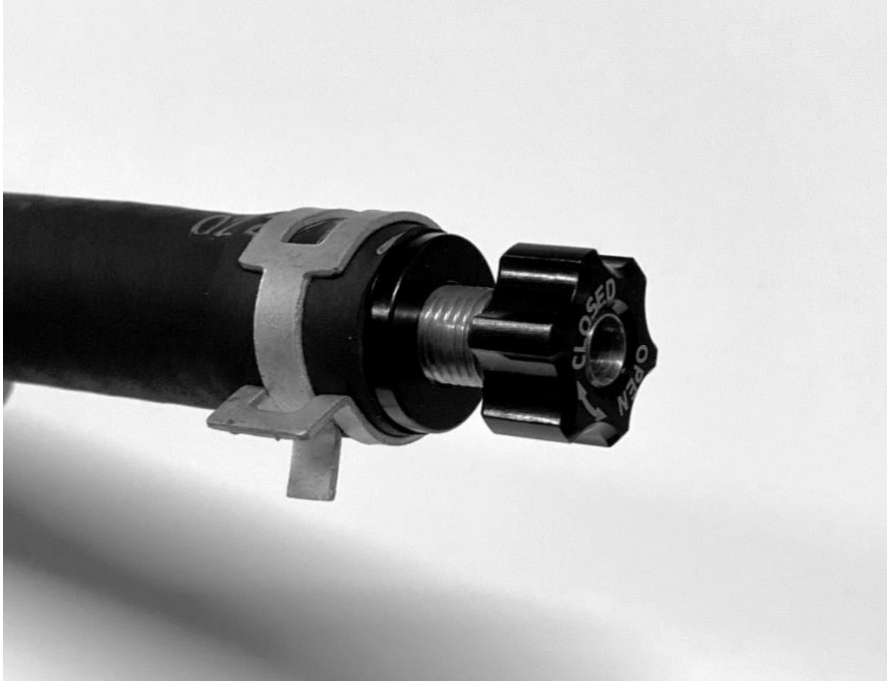
Provent 200 with 12mm hose connected and secured with a clamp

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



Pre-assembled Provent 200 with bracket – Please note ProVent rotation in this image is correct, your ProVent should come at the correct rotation in the box – if it is not, refer to the image on the last page of this installation guide.

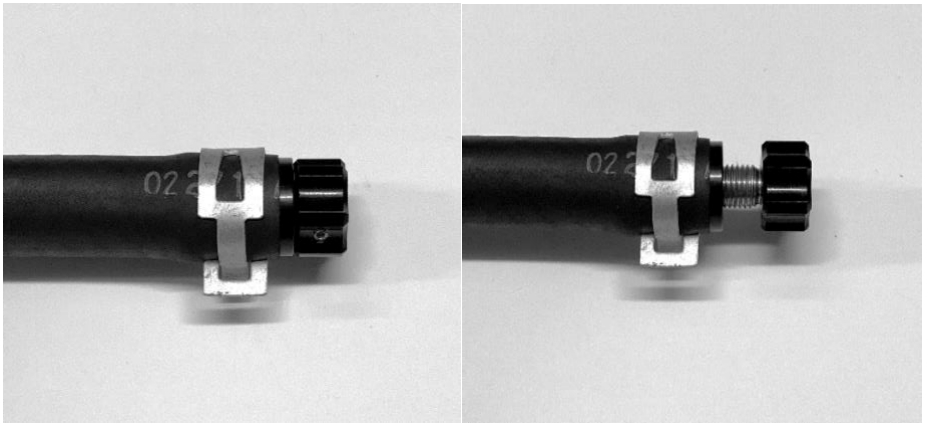
6. Feed the 12mm Hose down the side of the engine bay, under the vehicle to an out of the way location, making sure it is clear of any suspension, driveline and exhaust components, fit the Tap hose tail into the hose and secure with a hose clamp.



Drain tap assembly inserted into 12mm hose, secured with a clamp

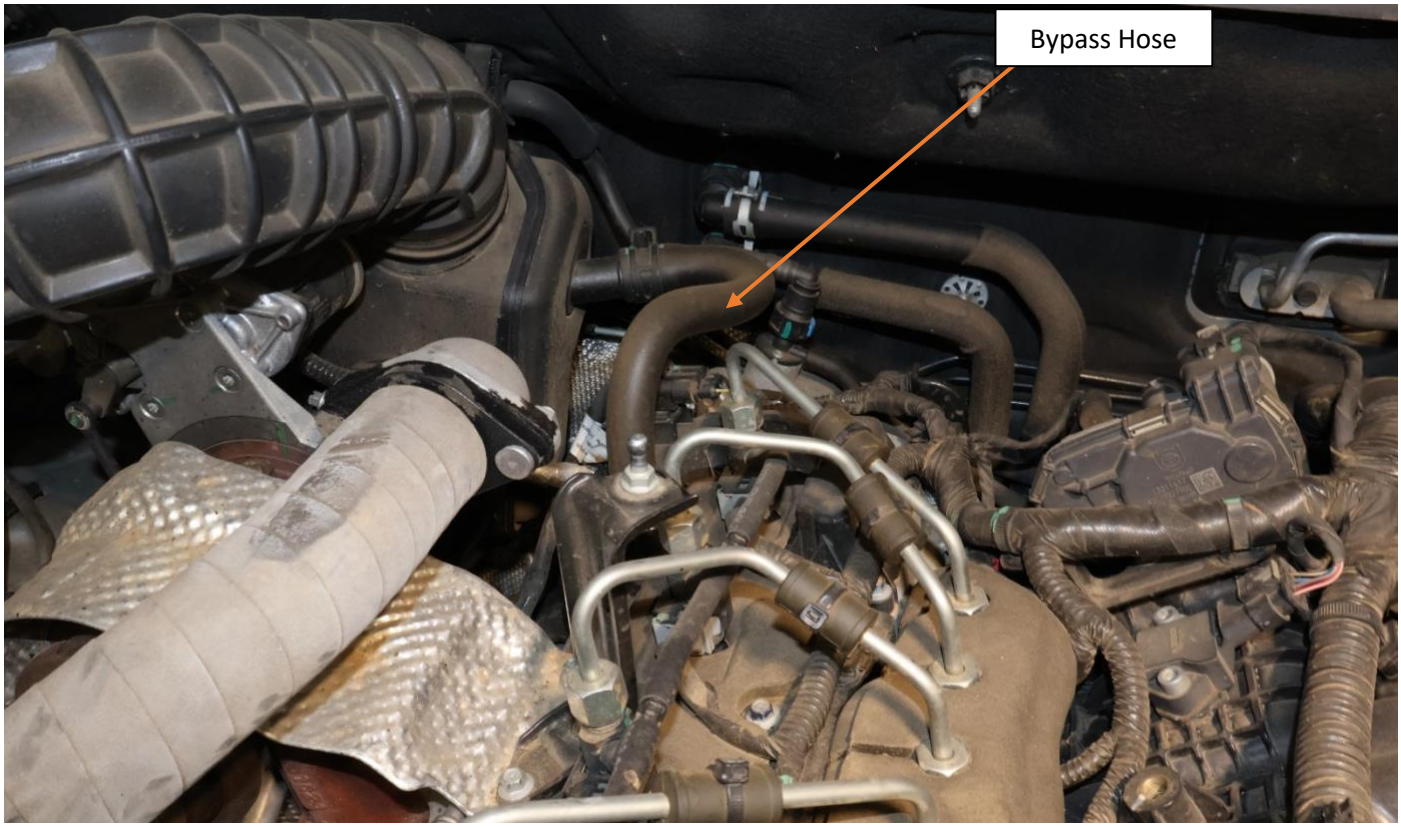
7. Use the supplied cable ties to secure the 12mm hose into the location required under the vehicle to prevent movement. Note: Leave a slight amount of slack in the line where the body and chassis join to prevent stretching the hose.

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



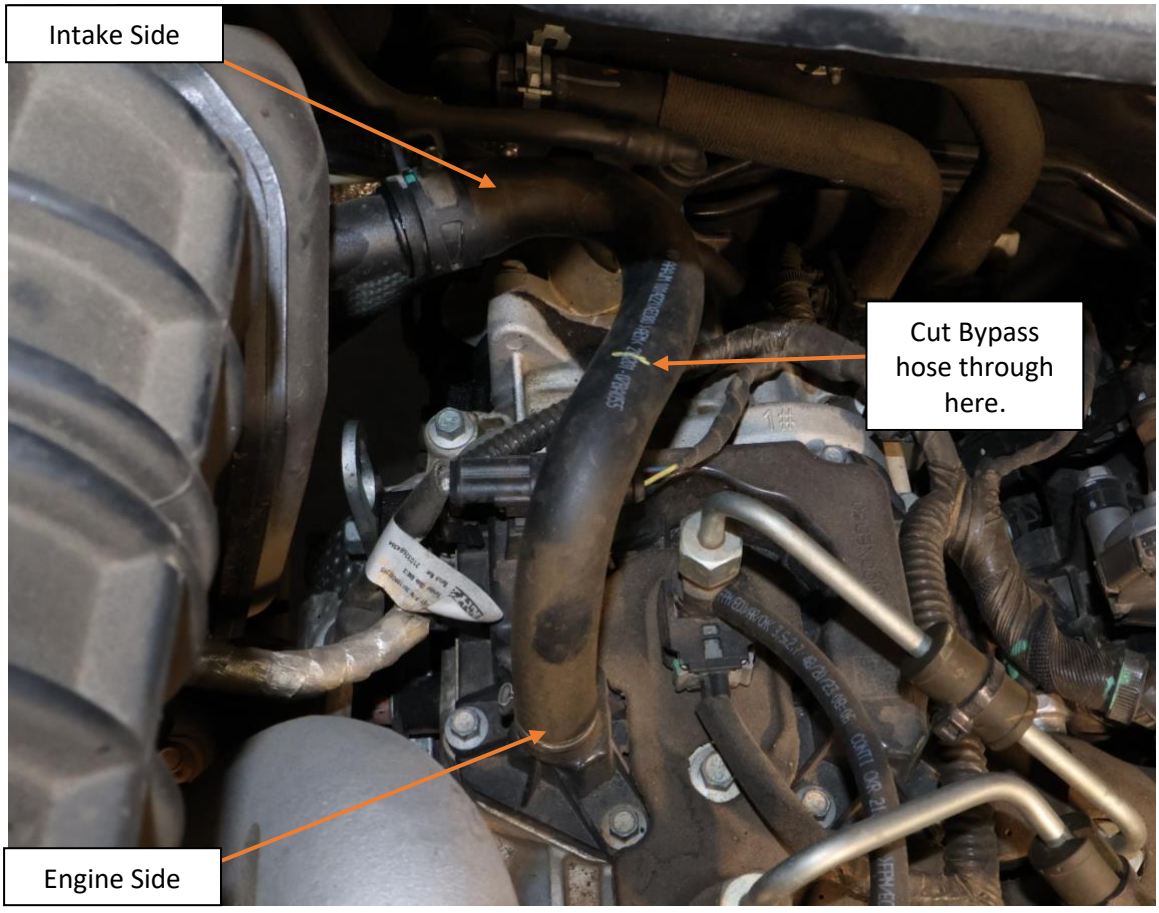
Left image – Tap Open. Right image – Tap Closed.

9. Locate the factory bypass hose which runs from the valve cover on the engine to the air intake resonance chamber.



Factory Bypass Hose Location

10. Cut the factory bypass hose in a similar location as marked in the image below. We cut it and reuse it due to the odd sizing of the return port on the intake as well as the fact its crimped to the outlet on the engine.



11. In the intake side of the cut bypass hose install a 90˚ joiner, using a spring clamp to secure in place.

12. In the engine side of the cut bypass hose install a 45˚ joiner, using a spring clamp to secure in place.

13. Install the 25-16mm reducers to the side ports on the ProVent 200, secure in place with the two larger spring clamps in the kit.

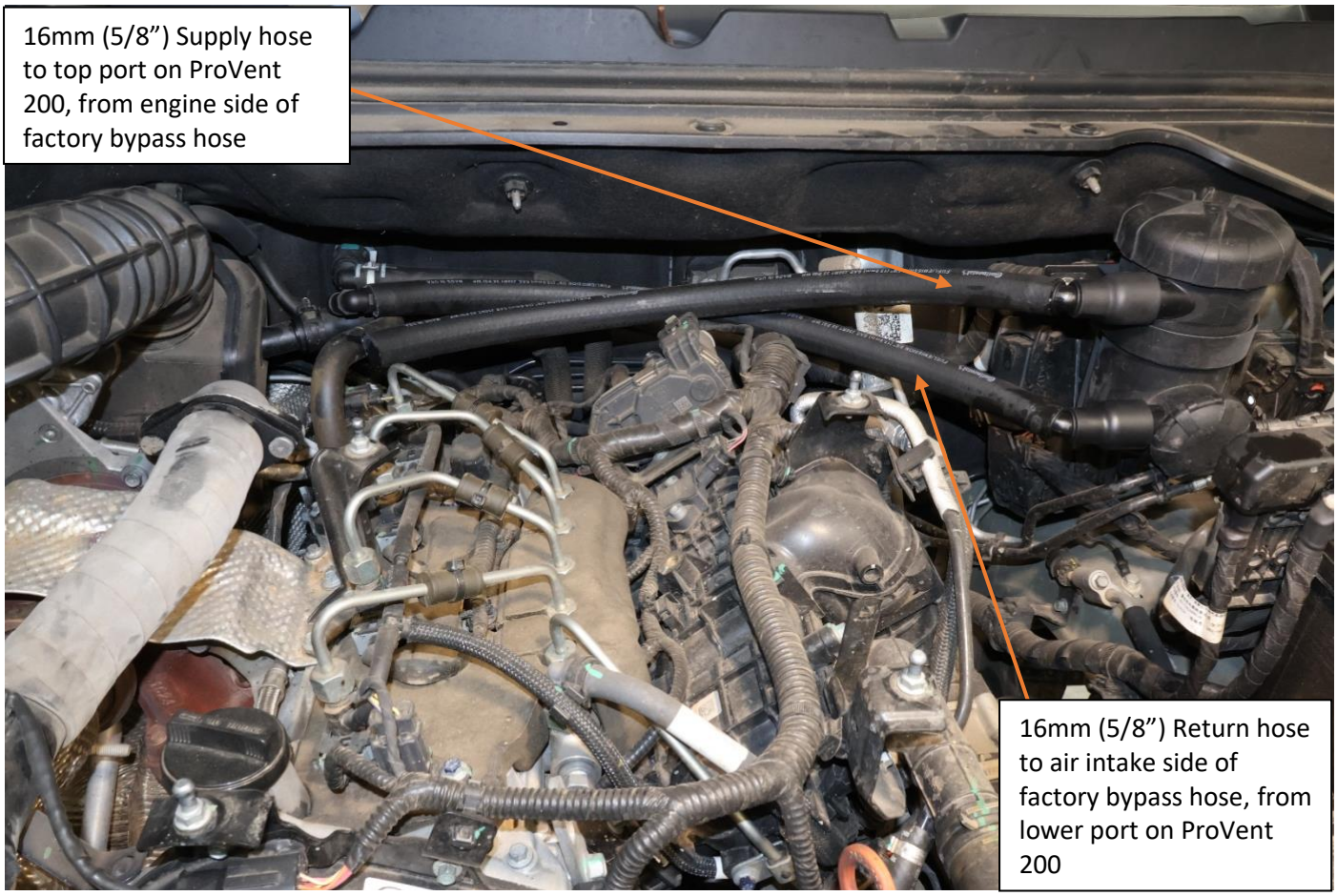
14. To the 16mm side of the reducers install a 45˚ joiner in each, using a spring clamp to secure in place.

15. Mount one end of the 16mm (5/8”) hose to the 90˚ joiner on the intake side of the factory cut bypass hose. Secure in place with a clamp.

16. Run the other end of the 16mm (5/8”) hose to the lower 45˚ joiner fitting on the ProVent. You will need to measure and cut to length. Secure in place with a spring clamp.

17. Mount one end of the remaining 16mm (5/8”) hose to the 45˚ joiner on the engine side of the factory cut bypass hose. Secure in place with a hose clamp.

18. Run the other end of the 16mm (5/8”) hose to the upper 45˚ joiner fitting on the ProVent. You will need to measure and cut to length. Secure in place with a spring clamp.



Hose configuration in Great Wall Cannon: Note hoses not fully connected in image and no clamps shown

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).

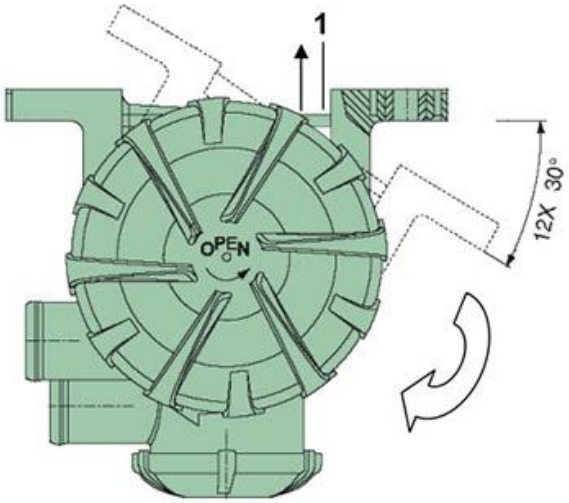


Fig. 5 Positions of outlet for ProVent 200

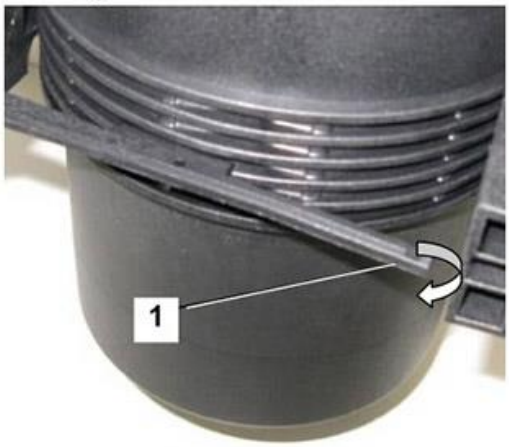


Fig. 6 Holder for ProVent 200

End of Installation Guide