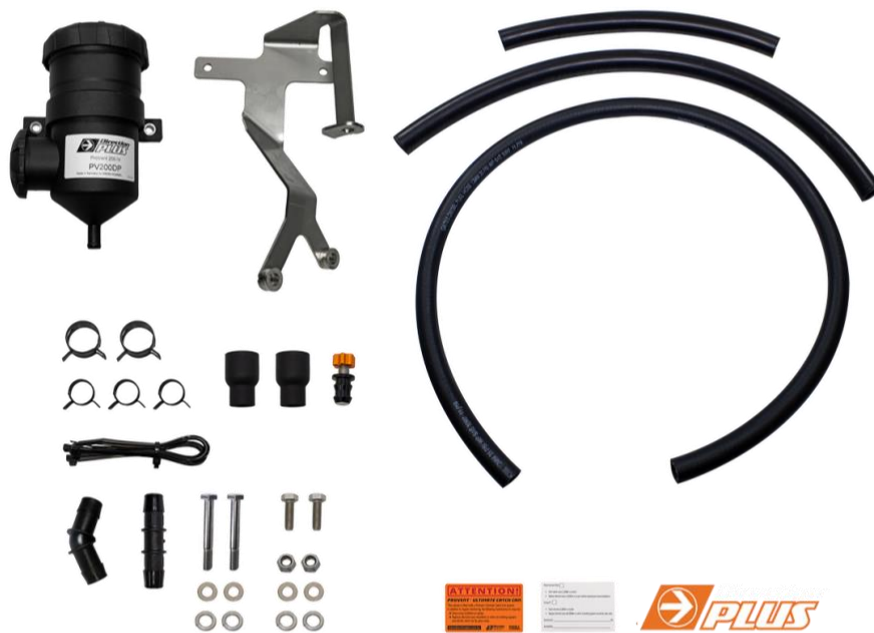


Installation Guide of ProVent Ultimate Catch Can Kit For Toyota Land Cruiser Prado 250 Series 2024+

This document is to be used as a guide for the installation of the **Direction Plus ProVent Catch Can Kit (PV668DPK)** to a **2024+ Toyota Land Cruiser Prado 250 Series Diesel with the 1GD-FTV (2.8l 4cyl)**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

Included in the kit



<i>Loose in Box</i>	<i>Bagged</i>	<i>ProVent Fitting Kit Bag</i>
1 x ProVent 200 (PV200DP)	1 x 16mm 45° Joiners (DPC4516)	2 x M8x25 Bolts (SSSS304M825)
1 x Mounting Bracket (PV668-BR)	1 x 16mm Straight Joiners (DPC0016)	2 x M8 Flat Washers (FMW8)
1 x 250mm of 16mm Hose (DPPH16)	4 x 16mm Spring Clamps (DPSC16)	2 x M8 Spring Washers (FMSW8)
1 x 400mm of 16mm Hose (DPPH16)	2 x 25mm Spring Clamps (DPSC25)	
	2 x 16mm to 25mm Hose Coupler (PV2516DP)	
1 x PVBOX	8 x Cable Ties (802078)	<i>ProVent Drain Kit Bag</i>
	3 x M8x30 Bolts (SSSS304M825)	1 x 1000mm of 12mm Hose (DPFH12-GAT)
	3 x M8 Flat Washers (FMW8)	1 x Drain Tap Assembly (DPDRAIN)
	3 x M8 Spring Washers (FMSW8)	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

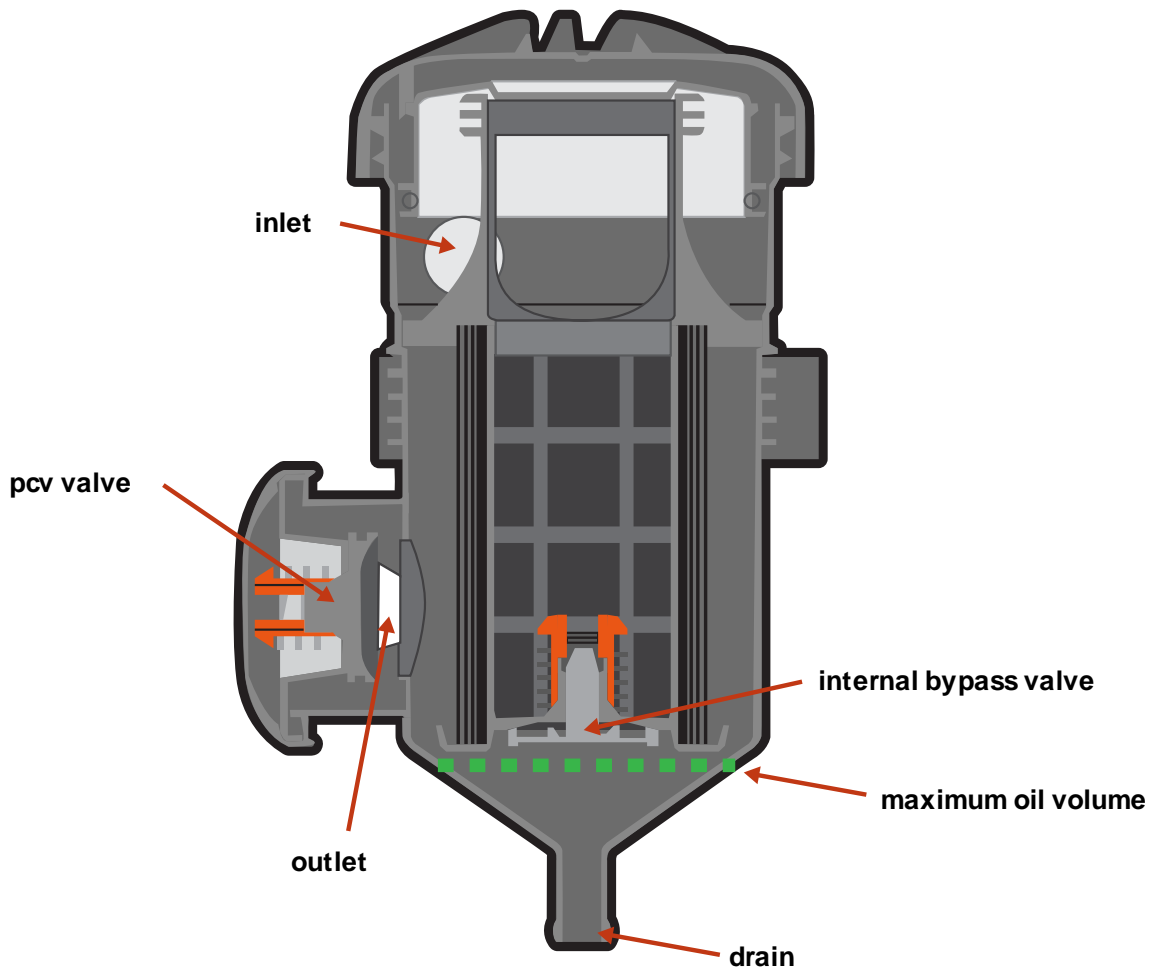
Maintenance / Servicing

- 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



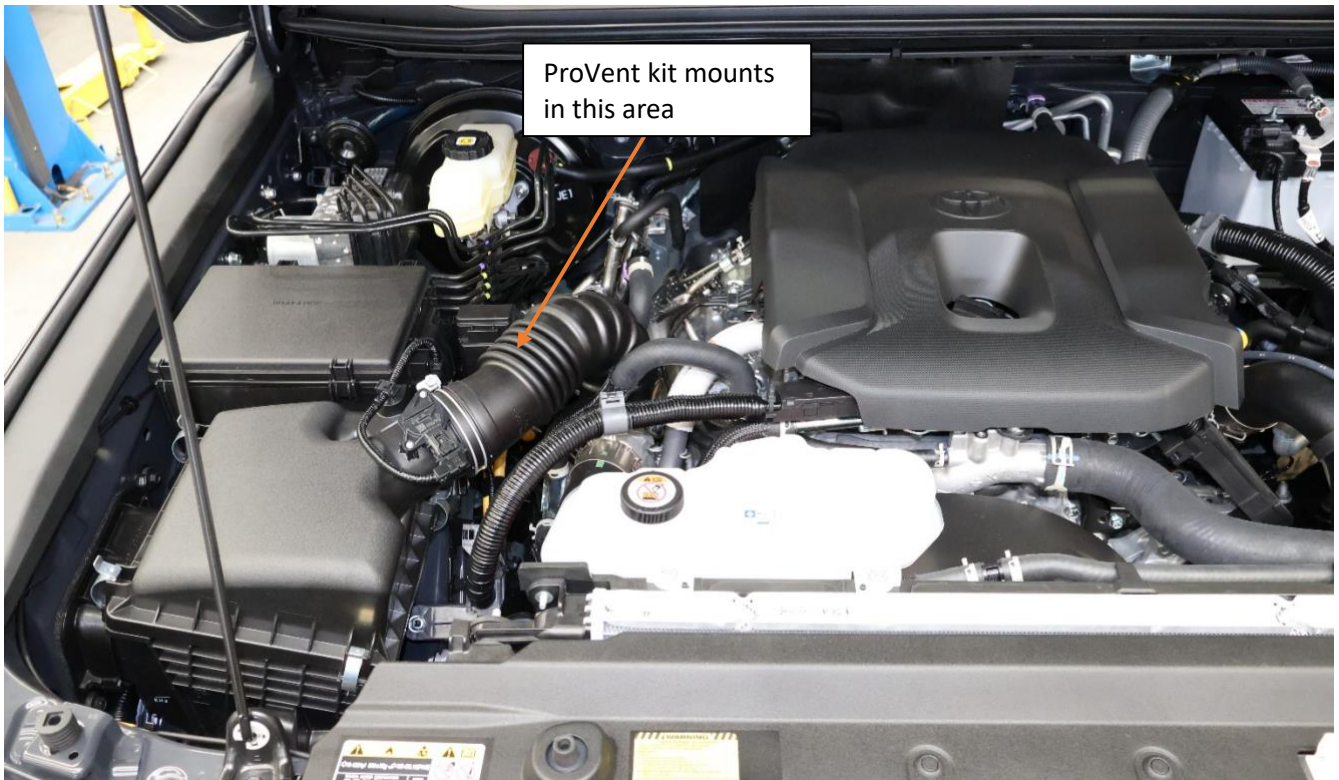
Due to the way the internally vented PV200 works, the PV200 must be drained regularly to ensure correct operation of the internal bypass valve. Failure to regularly draining/ servicing the Catch Can may cause engine damage due to over pressurisation of the crankcase ventilation system.

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.

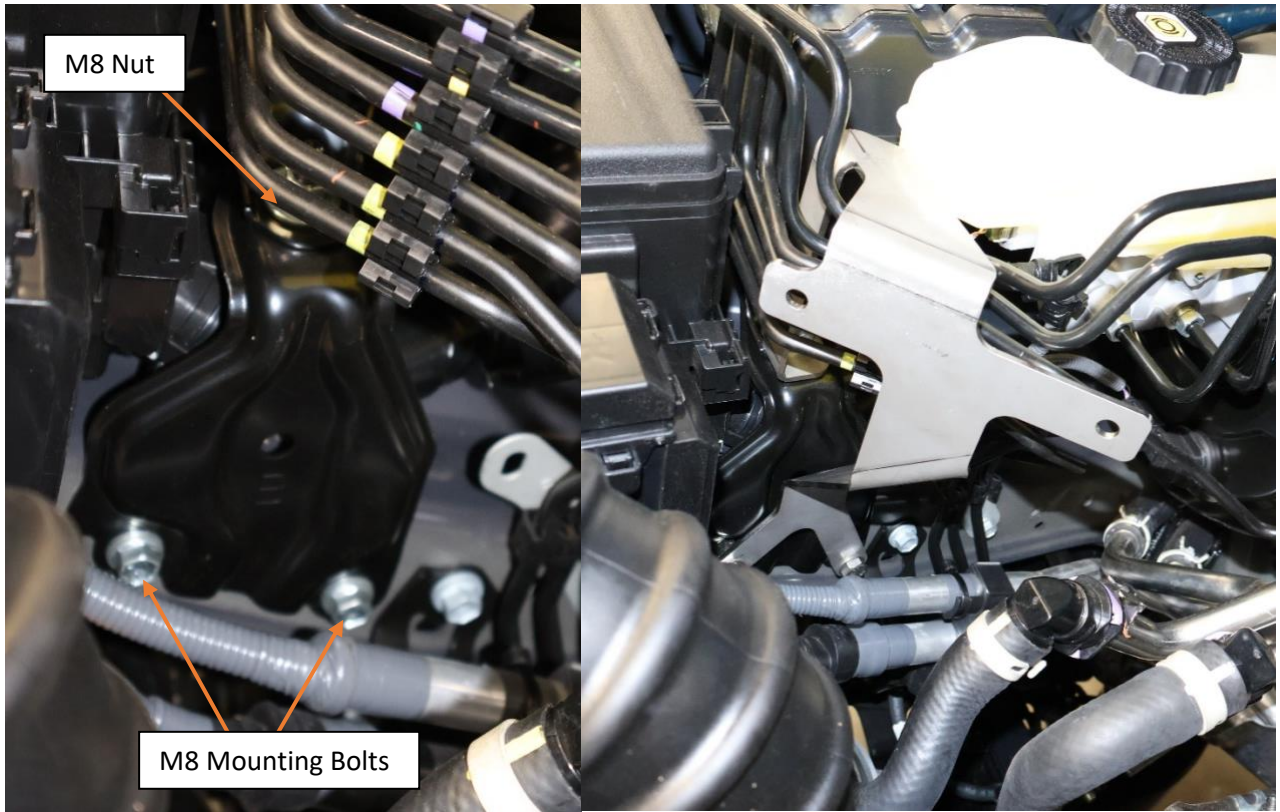
WARNING: Colder climates can cause increased condensation inside the Catch Can. This will fill the reservoir quicker than oil and will need to be drained regularly. Failure to do so could & can damaged the Catch Can or vehicle.

Installation Guide



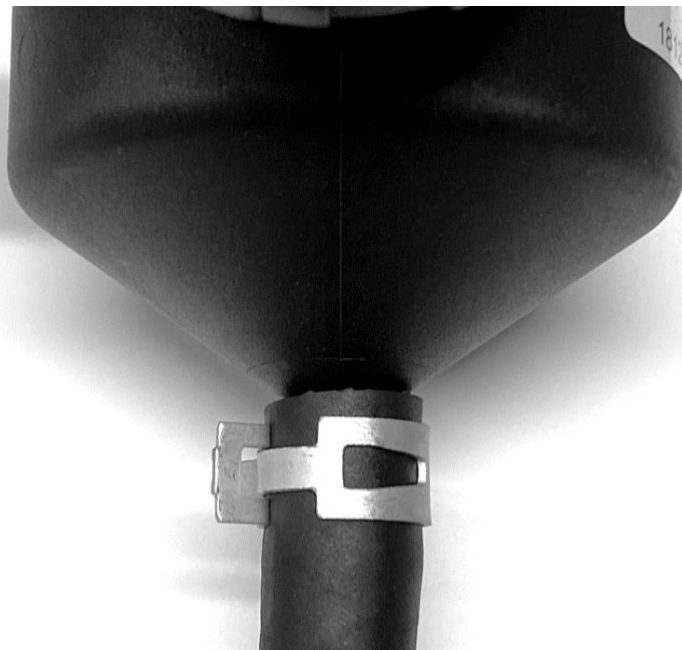
Land Cruiser Prado 250 Series Engine Bay – Driver's Side

1. Begin by removing the M8 nut on the top side of the ABS bracket shown in the following photos. Next, remove the two lower bolts that hold the ABS bracket in.
2. Fit the new ProVent Bracket over the vacant M8 stud and loosely install the original M8 nut again. Use the supplied M8x30 bolts with a spring washer and flat washer on each to secure the lower tabs of the new bracket, sandwiching the stock bracket through to the original threads in the body. Once they are in all three connections can be secured.



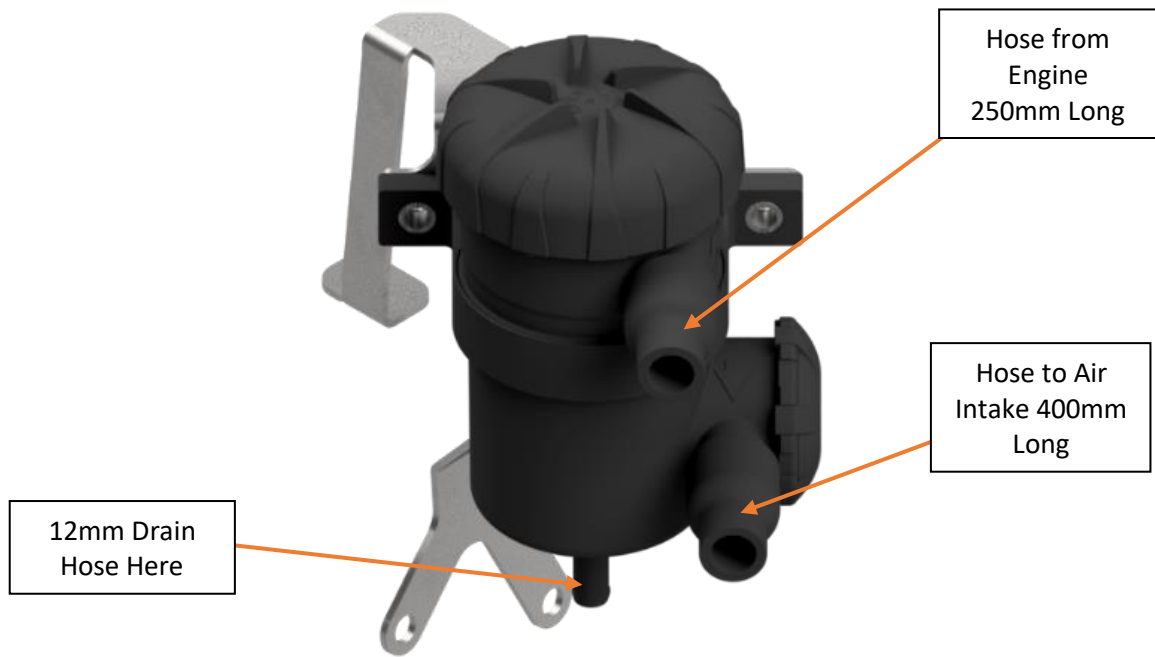
Land Cruiser Prado 250 Series ProVent Bracket Mounting

3. 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

4. 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.

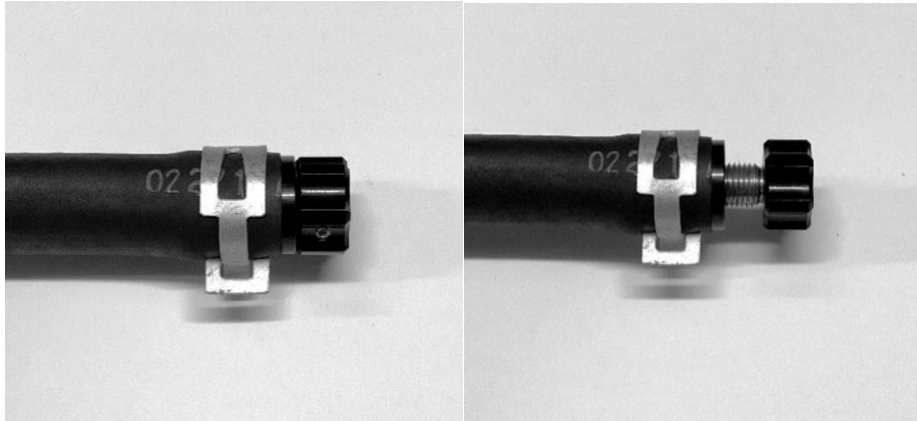
5. Feed the 12mm Hose down the side of the engine bay, under the vehicle to an out of the way location, making sure it is clear of any suspension, driveline and exhaust components, fit the Tap hose tail into the hose and secure with a hose clamp.



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

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.

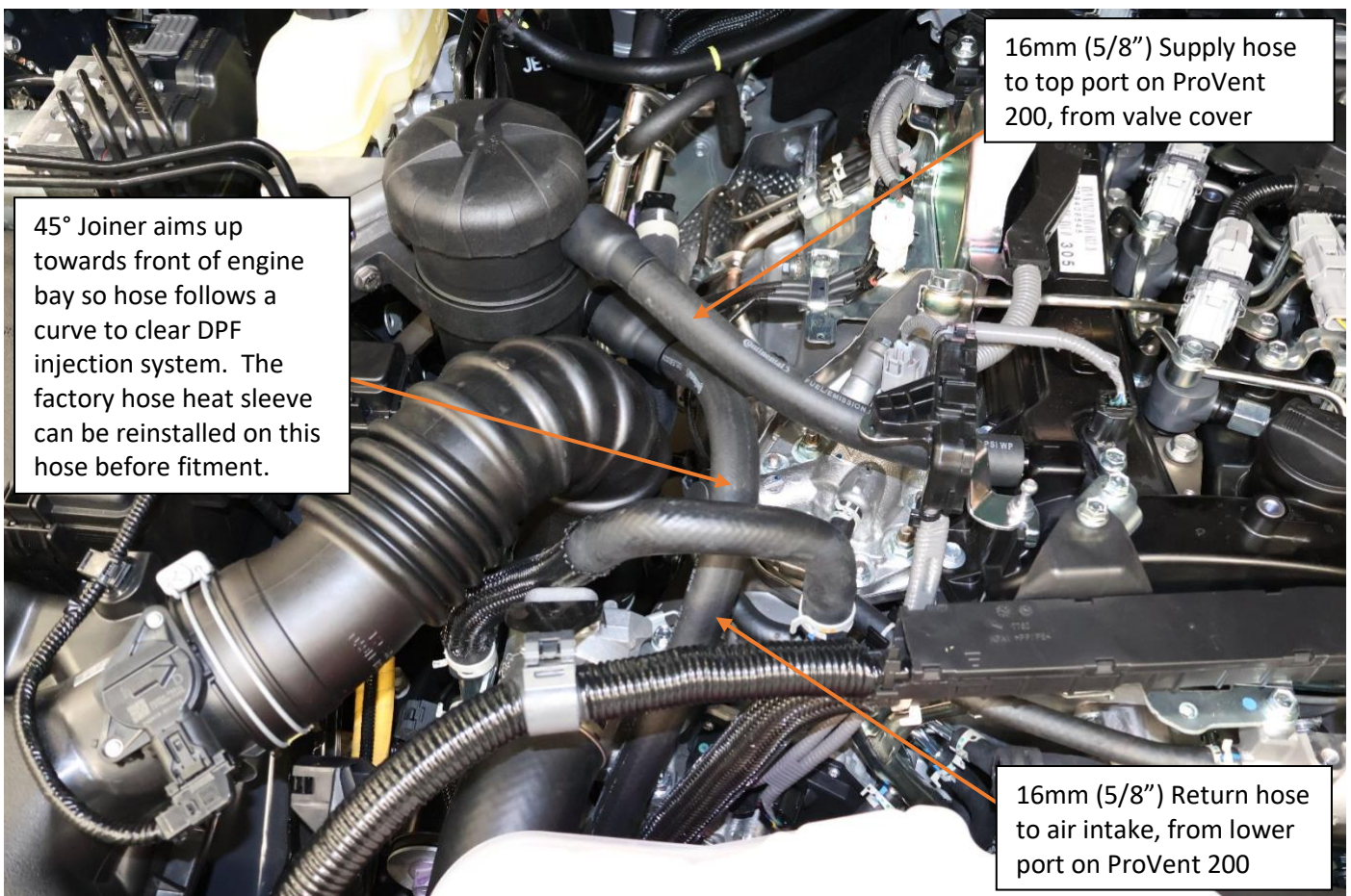


Left image – Tap Open. Right image – Tap Closed.

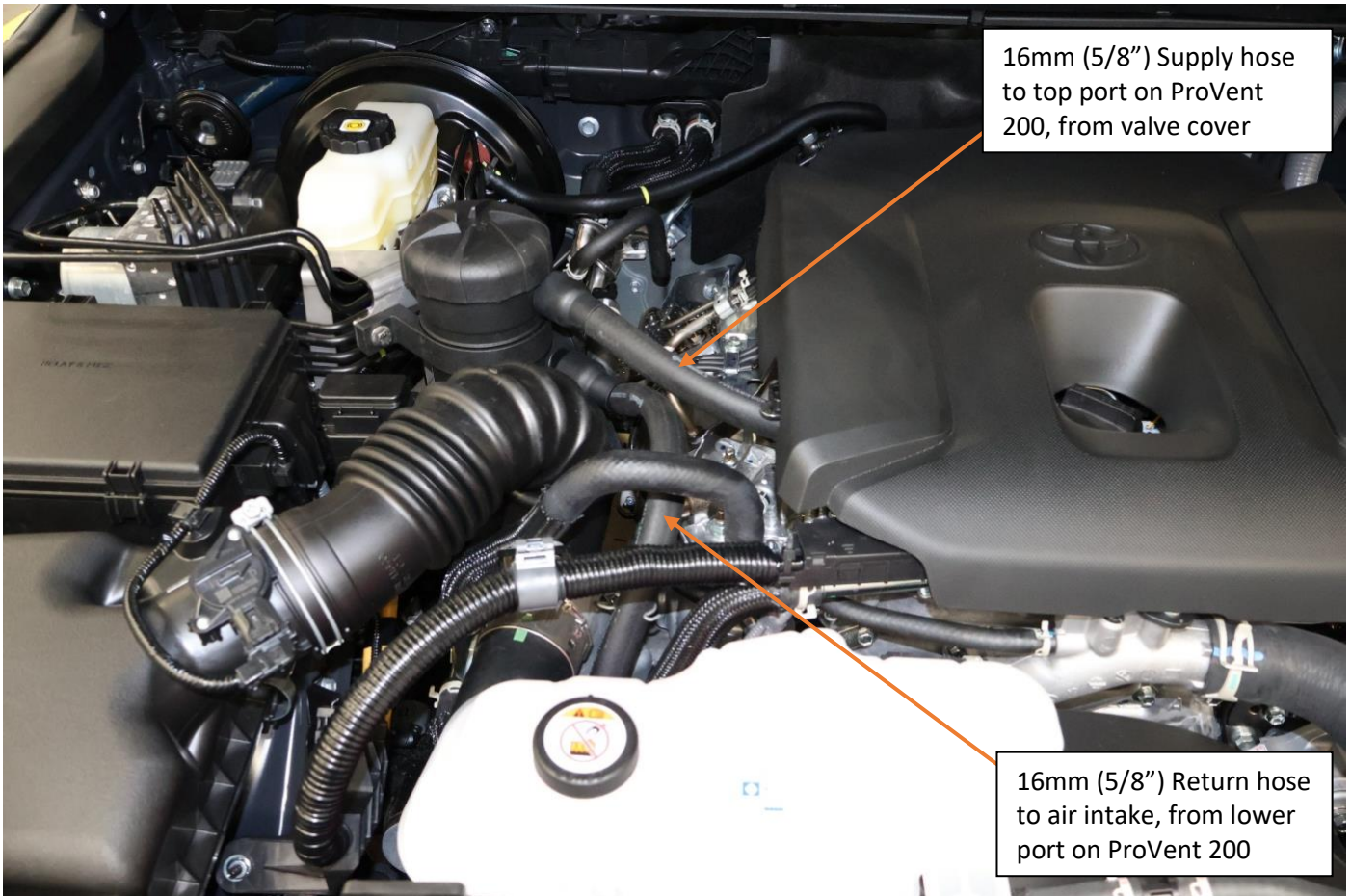
8. Remove the factory bypass hose from the valve cover on the engine, it is not reused in this kit.



9. Install the 25-16mm reducing couplers to the ProVent 200, use the two large spring clamps in the kit to secure them in place.
10. Install the 45° joiner fitting into the lower port and the straight joiner into the upper port, secure in place with the supplied spring clamps.
11. Mount one end of the 250mm long 16mm (5/8") hose to the now vacant outlet on the valve cover of the engine. Secure in place with the factory clamp.
12. Run the other end of the 250mm long hose to the top 16mm (5/8") straight joiner fitting on the ProVent.
13. Mount one end of the 400mm 16mm (5/8") hose to the lower 16mm (5/8") 90° joiner fitting on the ProVent 200. Secure in place with a supplied spring clamp.
14. Run the hose to factory bypass hose port on the turbo inlet that was left vacant from the hose you removed earlier. Secure in place with the factory clamp.



Hoses installed, not spring clamps shown, engine cover removed.



Hose configuration in Land Cruiser Prado 250 Series with ProVent 200 installed

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).

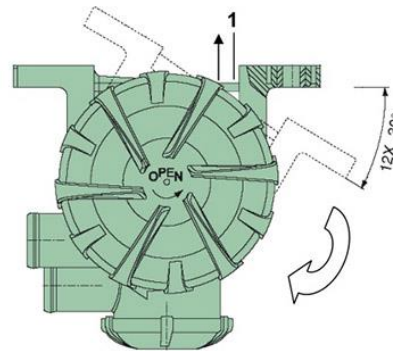


Fig. 5 Positions of outlet for ProVent 200

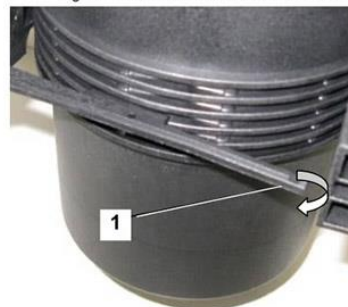


Fig. 6 Holder for ProVent 200

End of Installation Guide