



Toyota Land Cruiser Prado 120 Series 1KZ- FTV Direction-Plus™ ProVent® 200 Installation Guide

This document is to be used as a guide for the installation of the Direction-Plus™ Land Cruiser Prado 120 Series ProVent® 200 Crankcase Ventilation Kit to a 20002-2008 Toyota Land Cruiser Prado 120 Series Diesel with the 1KZ-FTV and 1KD-FTV 3L engine. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

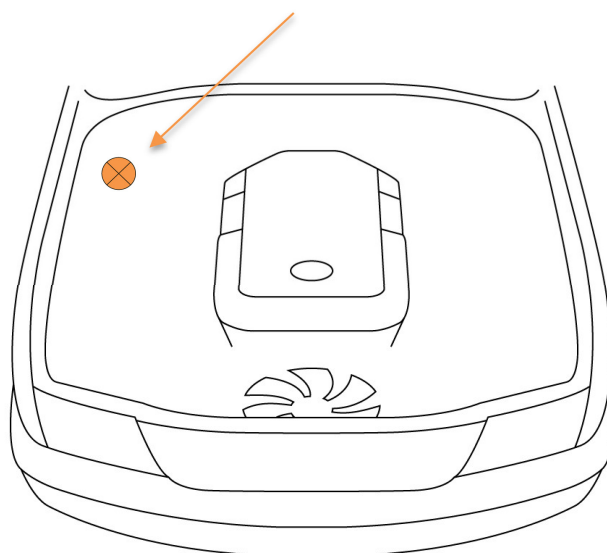
Important Before Starting

- 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

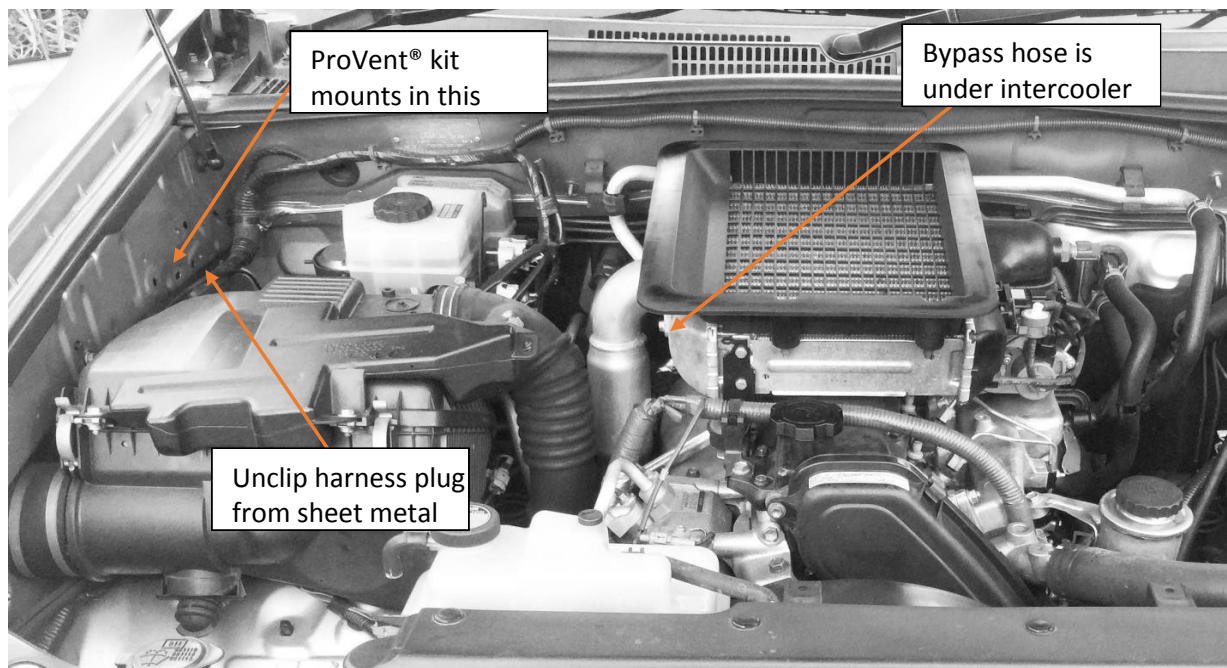
Included in the kit

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

Approximate mounting location

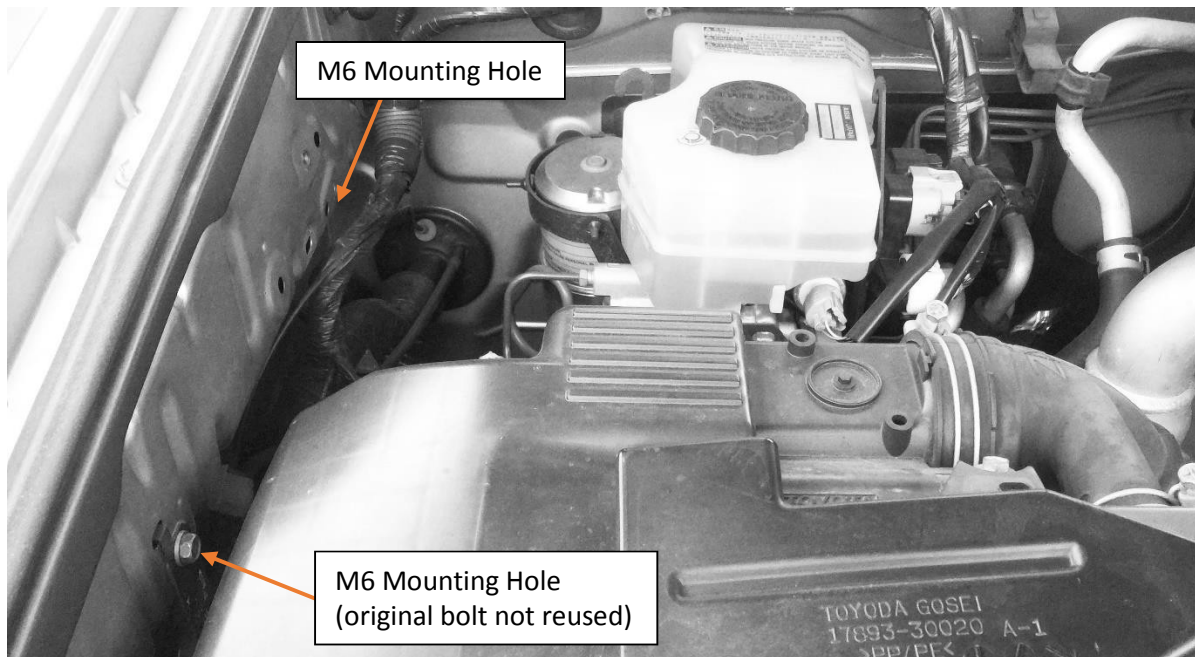


*Kit contents are subject to change based on component availability and/or refinement



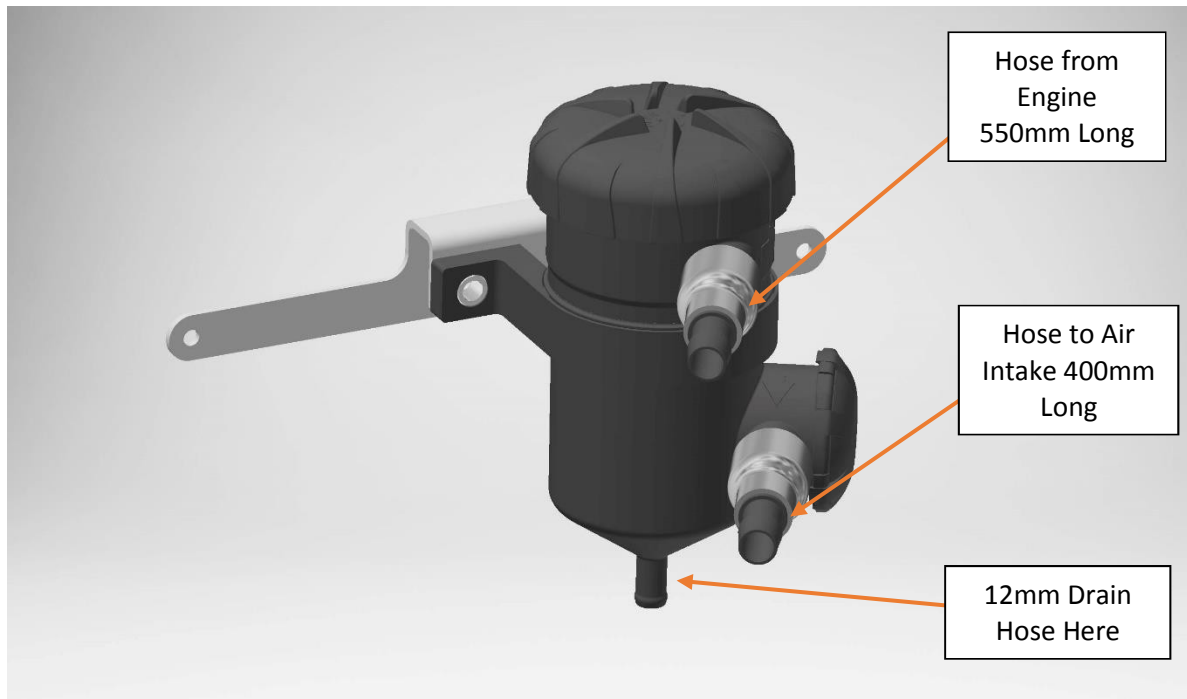
Land Cruiser Prado 120 Series Engine Bay – Overall View

1. Begin by unclipping the harness plug from the side of the engine bay (location shown above).



Land Cruiser Prado 120 Series ProVent® Bracket Mounting

2. With the ProVent® at the correct alignment, bolt the ProVent® 200 to the bracket using the M8 hardware ensuring there is an M8 washer under the bolt head as well as a flat washer and spring washer under the nut.



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 ProVent® correctly.

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 12-20mm worm drive clamp

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, steering, driveline and exhaust components while locating the bracket in to the correct location.
5. Bolt the preassembled ProVent® and bracket in place in the engine bay. It locates off the horn mount



(original bolt not reused) and an empty M6 threaded hole near the brake reservoir. Use the M6x16 bolts, flat washers and spring washers to retain in place.

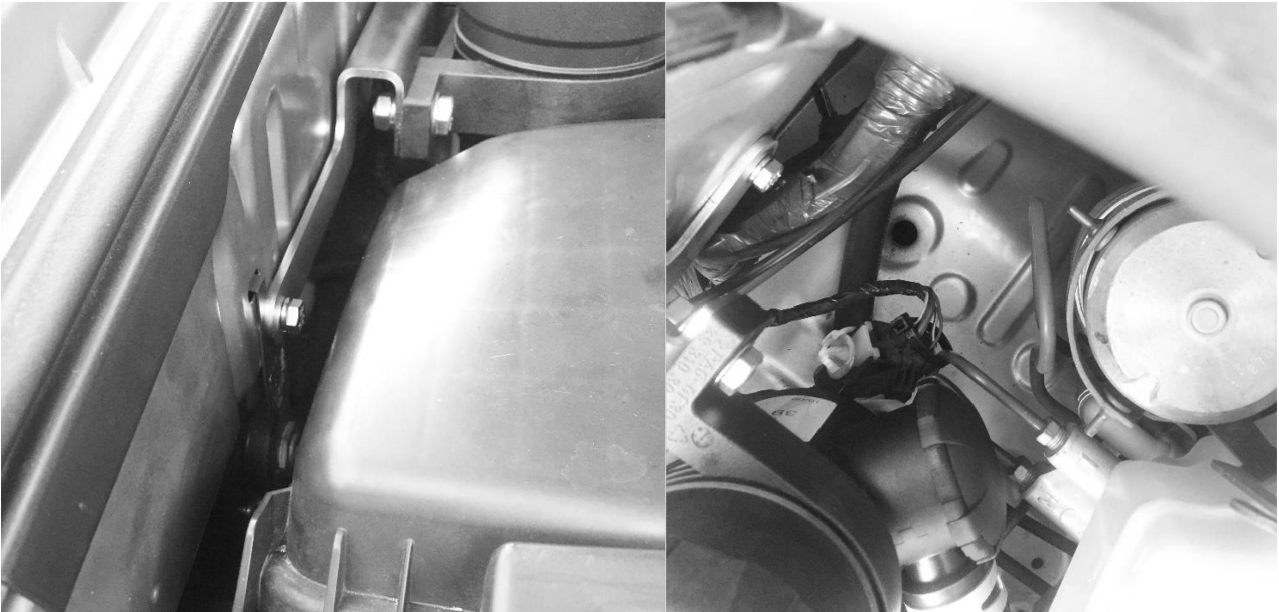


Image Left shows horn bracket under the new ProVent Bracket when bolted in place

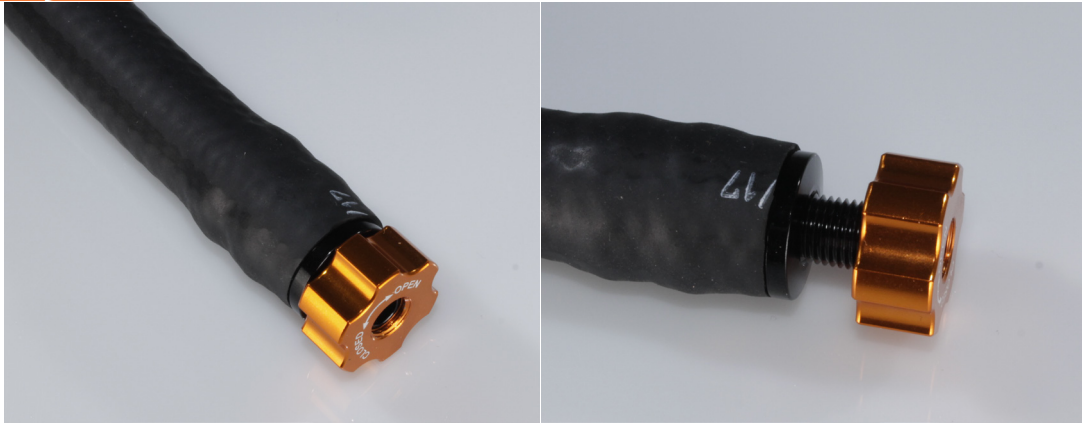
Image Right shows the original harness cable tied to the rigid brake lines and the rear M6 bolt securing the bracket in place.

6. Fit the Tap hose tail into the drain hose and secure with a 12-20mm clamp.



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

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.



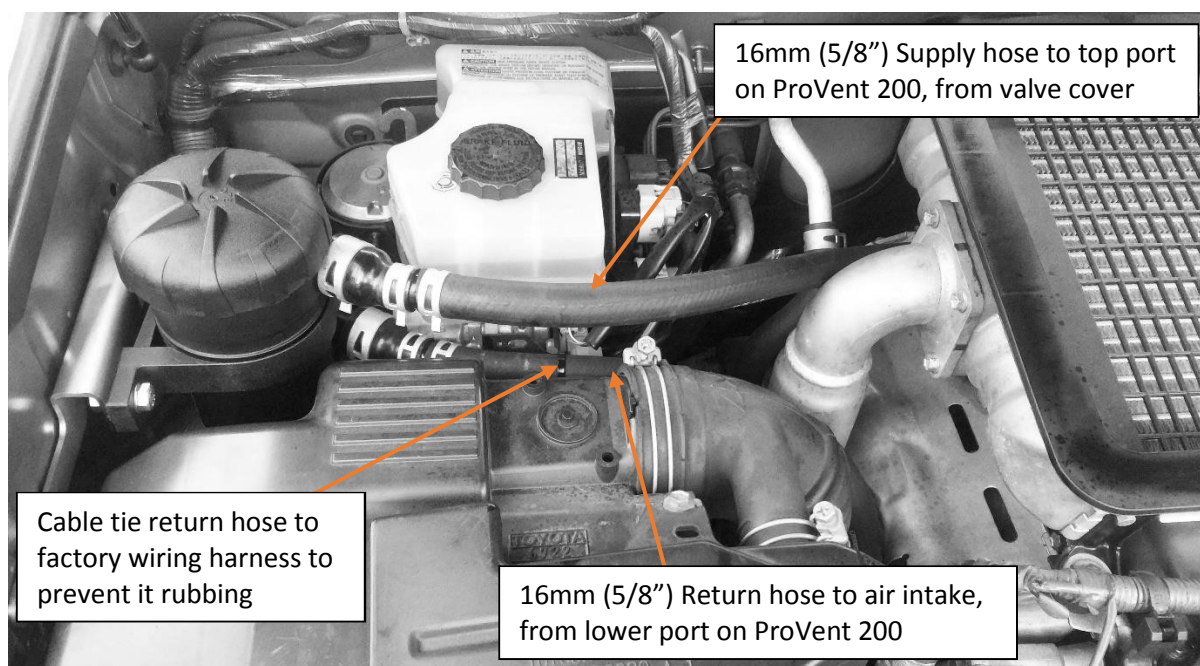
Left image – Tap Open. Right image – Tap Closed.

9. Remove the factory bypass elbow from the valve cover on the engine, the rigid steel pipe and the rubber hose joiner just in front of the turbo.
10. Install the 25-16mm reducers in place on the ProVent's 25mm ports, secure in place with the 25mm spring clamps.
11. Install the 16mm joiners to the 25-16mm reducers, secure in place with 16mm spring clamps.
12. Mount one end of the first 500mm long 16mm (5/8") hose to the now vacant outlet on the valve cover of the engine. You can use a hose clamp here if you wish, there are enough in the kit (The factory hose has no clamps).
13. Run the other end of the first 500mm long hose to the top 16mm (5/8") joiner fitting on the ProVent. You may need to trim it to suit your needs. Secure in place with a spring clamp.
14. Mount one end of the second 500mm 16mm (5/8") hose to the lower 16mm (5/8") joiner fitting on the ProVent 200. Secure in place with a hose clamp.
15. Run the other end of the second 500mm long hose to the return port just in front of the turbo. You can use a hose clamp here if you wish, there are enough in the kit (The factory hose has no clamps). Please note, on the 1KD-FTV version, the factory rubber joiner may need to be left in place and the spare 16mm plastic joiner in the kit may need to be used here.
16. Cable ties the lower hose to the vacant hole on the back of the air box to prevent rubbing on any components.



Image Left: Hose coming from top port in valve cover.

Image Right: Hose going to breather return just before turbo.



Hose configuration in Land Cruiser Prado 120 Series 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).

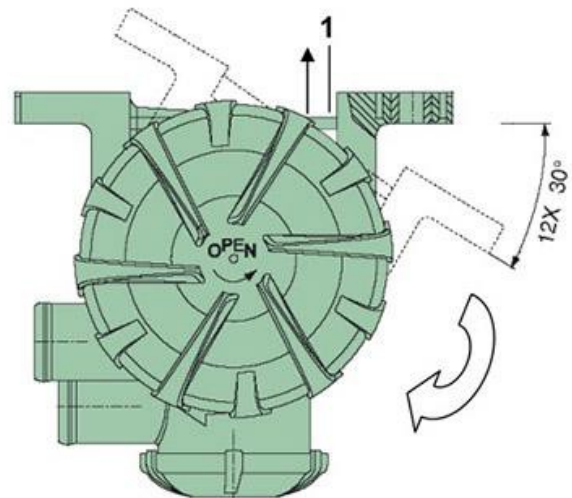


Fig. 5 Positions of outlet for ProVent 200

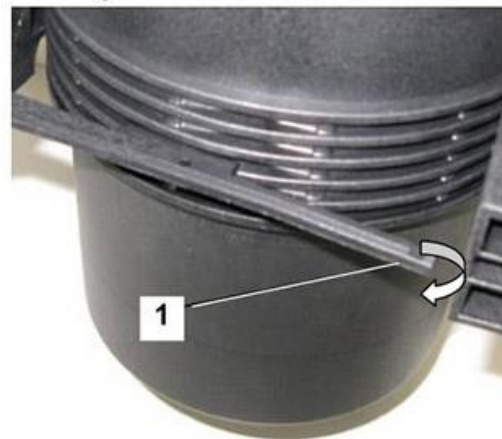


Fig. 6 Holder for ProVent 200