

Mitsubishi Triton MN 2005-2015 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 2005-2015 Mitsubishi Triton MN 2.5L Diesel**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

Important Before Starting

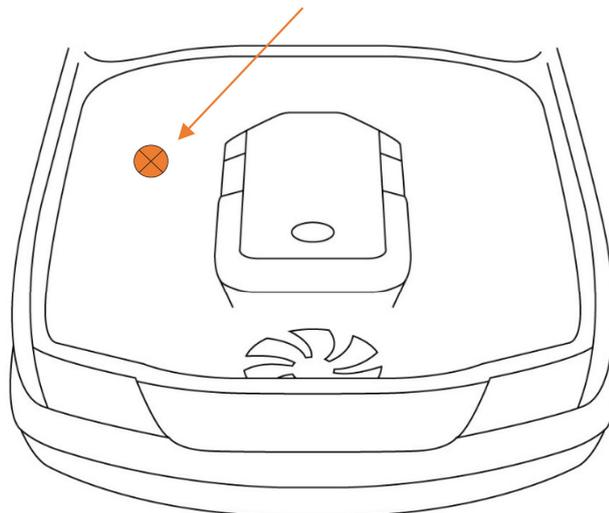
- Ensure you have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

Included in the kit

- 1 x Mann + Hummel ProVent® 200
- 1 x Mounting Bracket
- 1 x 240mm of 16mm Hose
- 1x 110mm of 16mm Hose
- 2x 55mm of 16mm Hose
- 4 x 16mm 90° Joiners
- 10 x 16mm Spring Clamps
- 2 x 25mm Spring Clamps
- 2 x 16mm to 25mm Hose Coupler
- 8 x Cable Ties
- 2 x M8x25 Bolts
- 4 x M8 Flat Washers
- 2 x M8 Nuts
- 2 x M8 Spring Washers
- 1000mm of 12mm Hose
- 1x Drain Tap assembly
- 2 x 12-20mm Hose Clamps

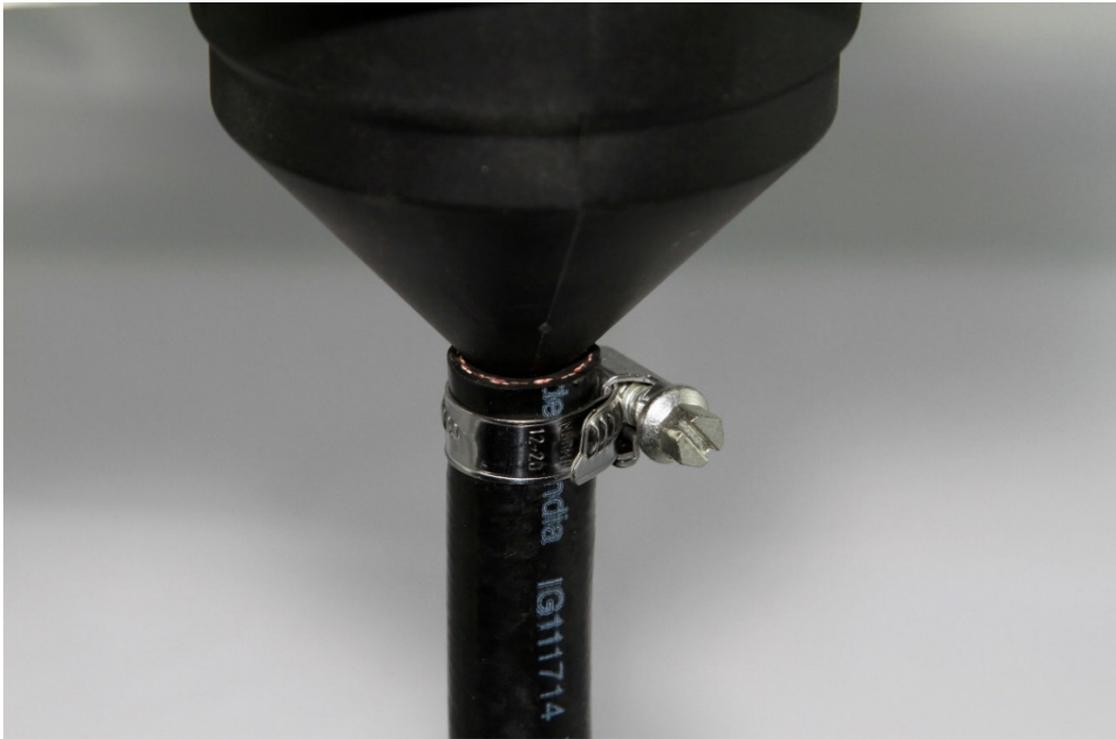
*Kit contents are subject to change based on component availability and/or refinement

Approximate mounting location



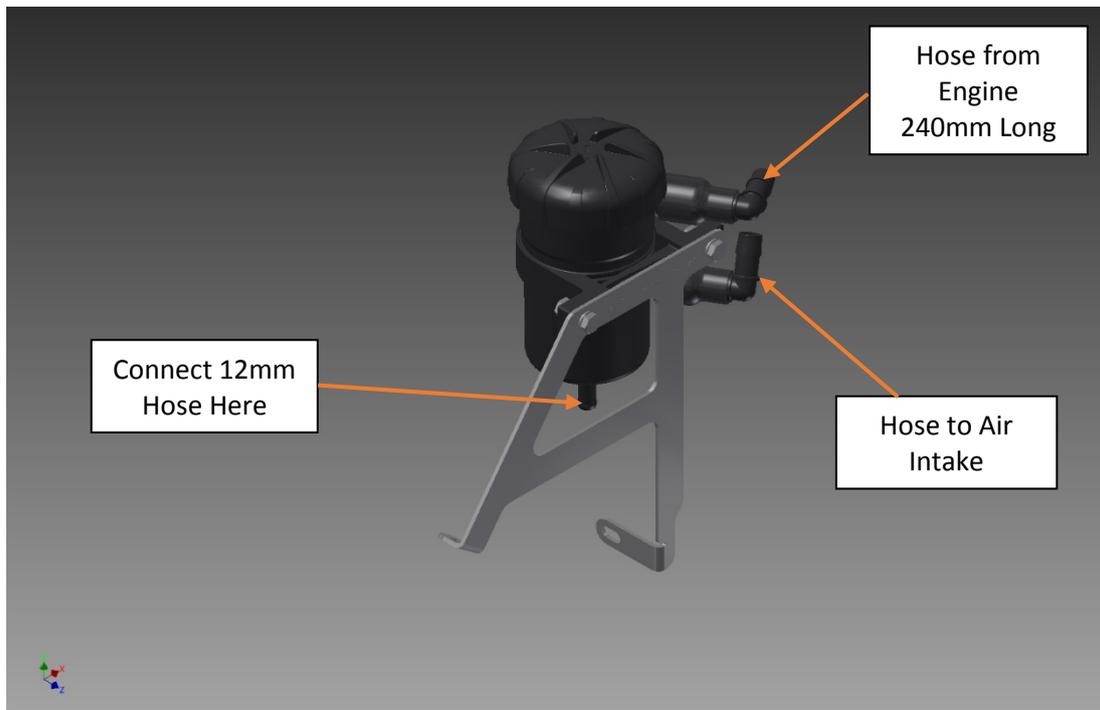
Installation Guide

1. Begin by removing the factory engine cover. It is held in place by four bolts. Locate the factory bypass hose which runs from the driver's side of the top of the engine to the air intake pipe before the turbocharger. The hose is only about 200mm in length and shaped like an "L". Once located, this hose needs to be removed from the vehicle.
2. Connect the 12mm hose if the drain kit to the underside of the catch can and use a 12-20mm Clamp to secure it in place.

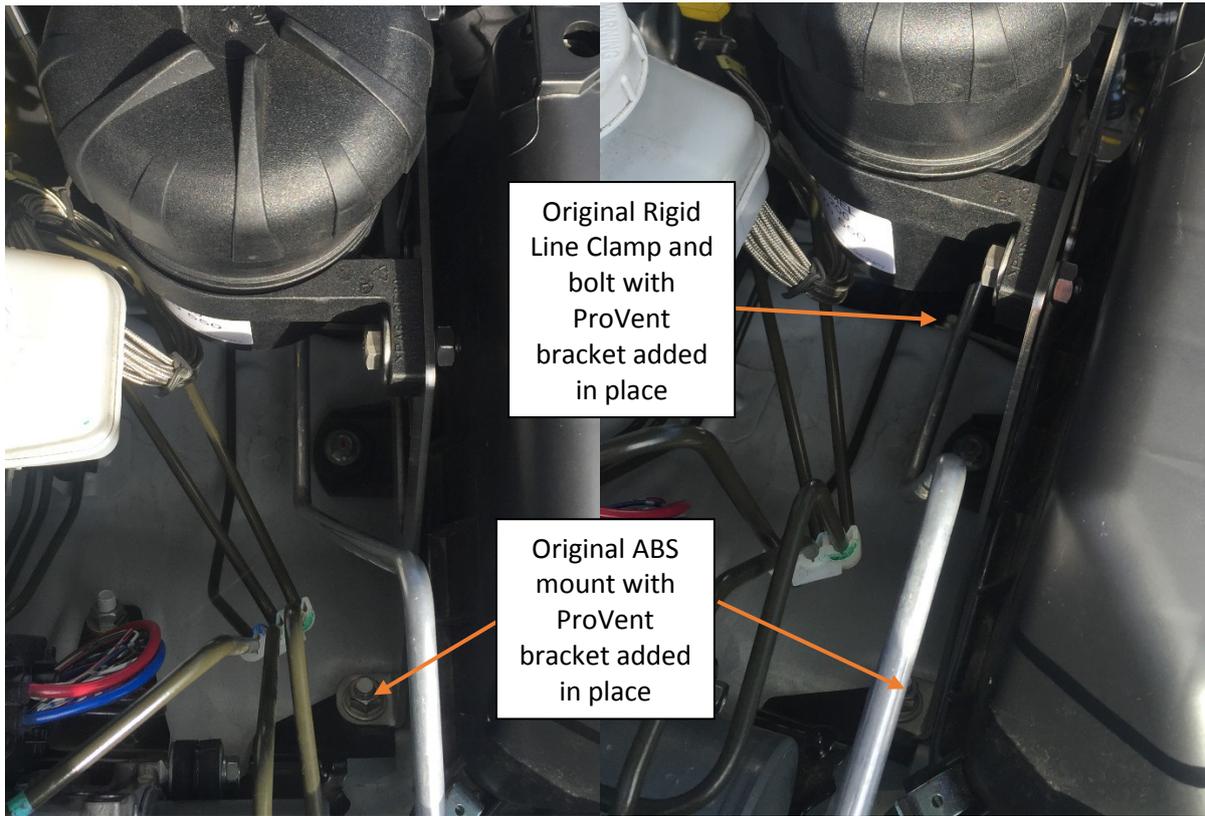


ProVent® 200 with 12mm hose connected and secured with 12-20mm worm drive clamp

3. Loosen and remove the nut retaining the ABS from behind the air box. Also remove the bolt retaining the rigid line to the inside of the inner guard, the new bracket mounts off these two points. Install the bracket and use the original nut and bolt to secure the new bracket in place. Next, bolt the ProVent® 200 to the bracket using the supplied bolts, washers and nuts.



Pre-assembled ProVent® 200 with Triton ML-MN bracket



ProVent® mounting bracket in place in ML-MN Triton (2 views, different angles)

4. Feed the 12mm drain hose down 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.



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

5. Use the supplied cable ties to secure the 12mm drain hose into the location required to prevent movement, just leave a slight amount of slack in the line where the body and chassis join to prevent stretching the hose.
6. Make sure the tap position is closed and avoid placing the tap in a location in which it will fill with dirt and mud.



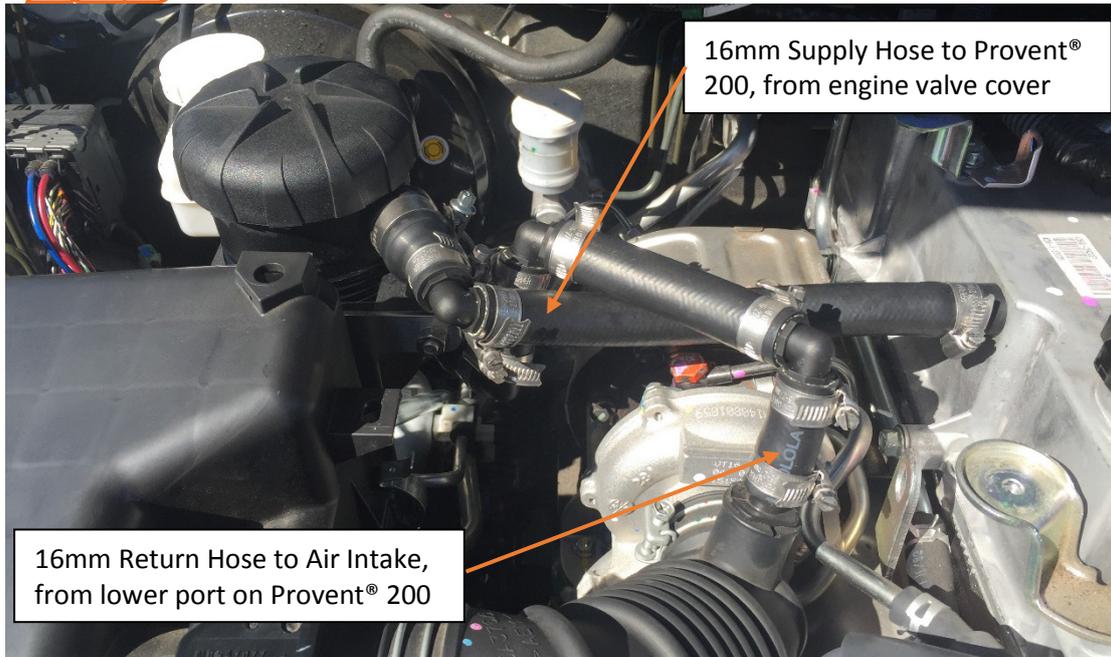
Left image – Tap Open.

Right image – Tap Closed.



Hose assemblies before fitment to ML-MN Triton: Top hose is supply from engine, lower hose is return to air intake

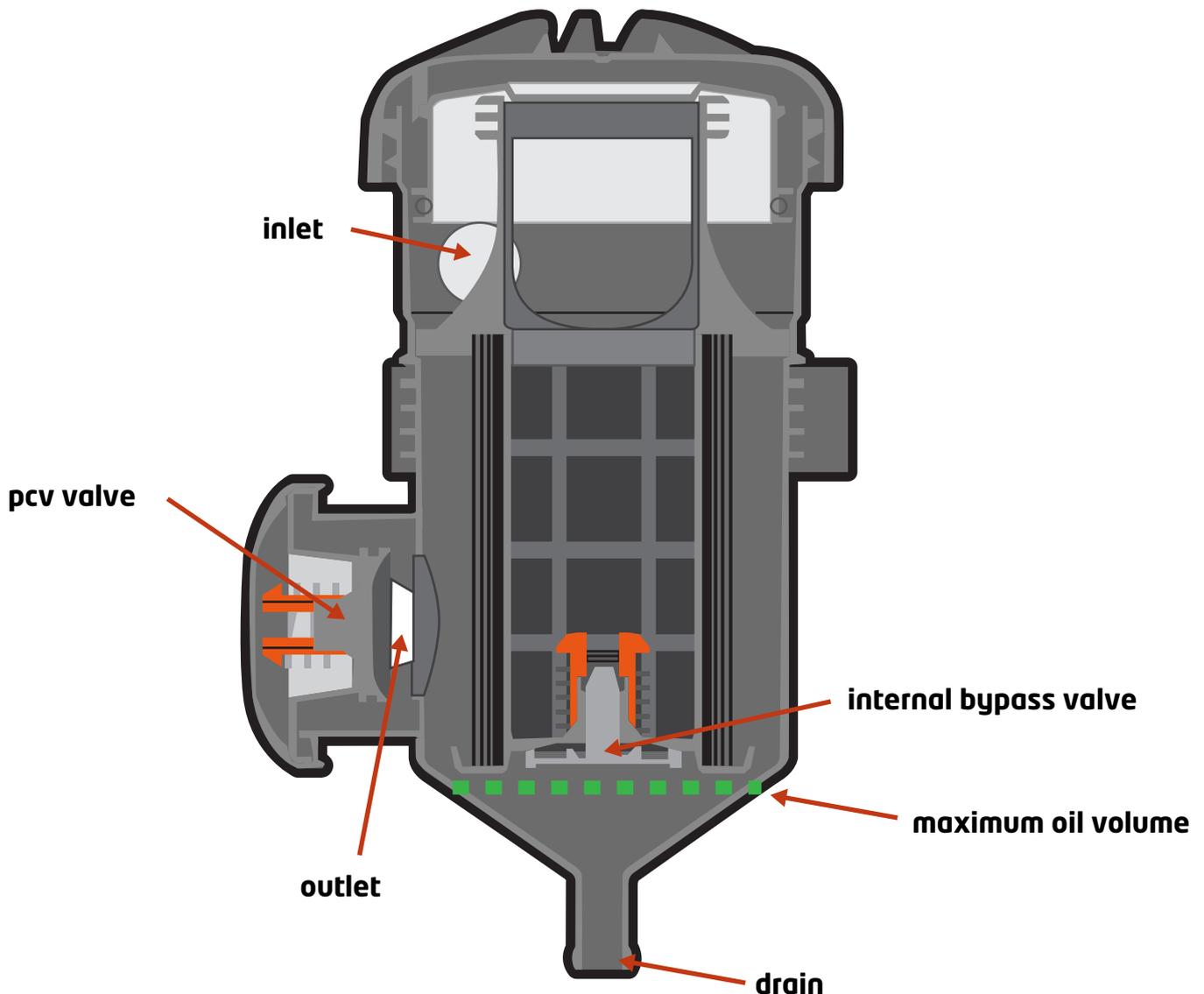
7. Mount one end of the lower hose assembly to the lower 16mm 90° joiner fitting on the ProVent® 200. Use a 16mm clamp to secure it in place.
8. Mount the other end of the lower hose assembly to the black air intake pipe where the stock hose was removed earlier, using a 16mm clamp to secure it in place.
9. Mount one end of the top hose assembly to the Upper 16mm 90° joiner fitting on the ProVent® 200. Use a 16mm clamp to secure it in place.
10. Mount the other end of the upper hose assembly to the 16mm fitting on the engine where the stock hose was removed from earlier, using a 16mm clamp to secure it in place.



Engine bay hose locations for ML-MN Triton 2.5L diesel

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).

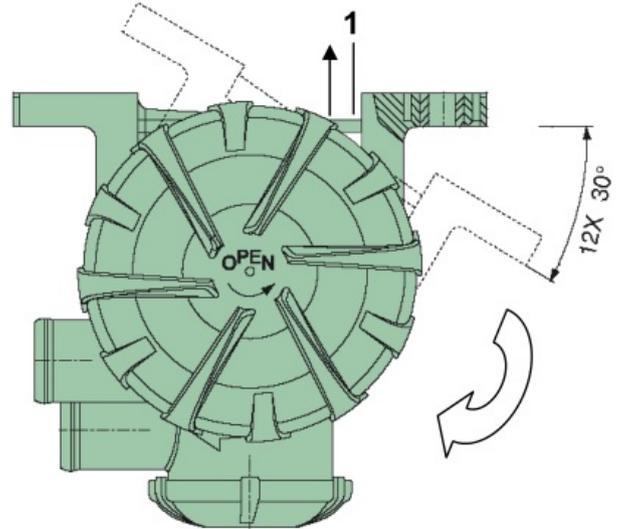


Fig. 5 Positions of outlet for ProVent 200

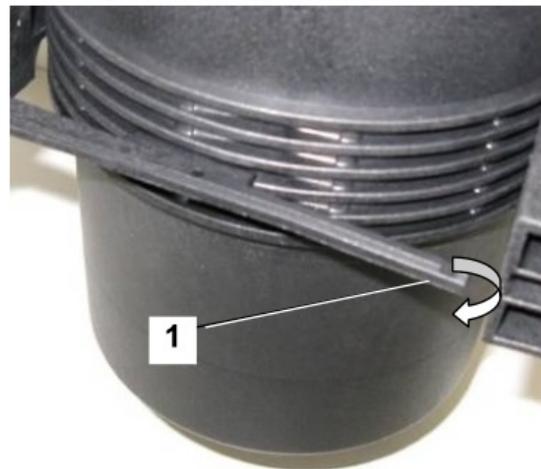


Fig. 6 Holder for ProVent 200