



LM2 / LZ0 3.0L Duramax Catch Can Install Guide

Purpose

This will serve as a guide to install and use your new **VIN Specific Enterprises** Catch Can on your LM2/LZ0 equipped 3.0L Duramax. Slight adjustments to ensure proper fitment may be required based on customer installation.

Theory of operation

The Catch Can by VIN Specific Enterprises is designed specifically for the 3.0L Duramax Equipped Engines (LM2 / LZ0)/. By design it will mimic OEM CCV pressure through the can and assembly. It was CRITICAL that we kept the catch can as close to the OEM CCV system and turbocharger inlet so we do not place any additional restriction on the CCV system. It was also important to keep the Catch Can in the engine bay to keep it warm during run time. The catch can removes oil and emulsified oil from the CCV system by 2 sets of maintenance free baffling that serve as area for the higher density water/oil mixture to drop out of the CCV system prior to entry into the turbo charger inlet. The CCV system operates at a vacuum nearly in all cases under load due to the draw from the turbo inlet. If in the unlikely event that the catch can or CCV becomes plugged up an internal cross over relief is provided to relief pressure near 1 psig to protect the seals of the motor.

Estimated install time ~30 minutes

Tools Needed

- 1) It is **HIGHLY RECOMMENDED** to use a pair of long reach wire spring hose clamp pliers to remove the retention springs on the turbo AND to reinstall the retention springs. Long nose vise grips will work but will increase the level of frustration.



- 2) 13mm socket and ratchet
- 3) 13mm end wrench
- 4) 1 can of your favorite cool refreshing beverage



!! Do not install this kit if you have a Pending or current P04DB for crankcase ventilation disconnected. This kit does NOT serve as a fix for that code. Your CCV system needs inspected for leakage PRIOR to installation !!

!! Do not take this Catch Can apart unless it is required. The internal o-rings are heat tempered and difficult to get back into place. There really is no need to remove or disassemble after it is installed. There is no maintenance required other than draining as required (covered below) !!

Install Procedure

- 1) **ENSURE** the key is off and the vehicle cannot be started during installation.
- 2) **DISCONNECT** the CCV inlet hose from the turbo charger inlet. (see below)



- 3) **REMOVE** the 13mm bolt from the battery hold down and discard (See below)



- 4) **INSTALL** your new VSE catch can in this location using the supplied 13mm bolt and nut (see below). Do NOT tighten fully yet ! (shown below)



- 5) Using the supplied hose with the crossover relief **INSERT** the end with the barb into the hose removed from the turbo inlet in step 2. Use the factory spring retention clamp to secure it.



- 6) **CONNECT** the 2 short ends to the catch can and use the supplied spring clamps to secure. The crossover relief valve arrow will be pointing towards the front of the vehicle.

- 7) **ENSURE** the catch can is pulled tight to the battery tray and then tighten the bolt/nut installed in step 4 to 15 ft/lbs



- 8) **ENSURE** the bottoms of the clamps are not rubbing on the wiring loom that sits over the turbo charger actuator (see below)



- 9) **CONNECT** the remaining hose end to the turbo inlet and secure with the supplied spring retention clamp (see below)



- 9.) **START** the vehicle up and ensure all dash message and check engine lights are clear.

Directions for use

- 1) **!!! Important!!!** Drain the catch can at a **MINIMUM** of every 5,000 miles AND on your oil changes. The sight glass serves as a reference to the fluid level inside the can which will be a mixture of oil and emulsified water / oil. Failure to drain the catch can before it is full will result in a P04DB as well as engine seal issues. Colder weather will require draining more often due to dew point changes occurring inside the catch can.
- 2) The best way to drain is to use the integrated hose and set a can or bottle below it. Use your other hand open the ball valve drain and drain until empty. The cap on the drain line is for aesthetic purposes only.



Final install

