## 2019+ HYUNDAI VELOSTER TURBO DIRECT-FIT BAFFLED OIL CATCH CAN KIT, PCV SIDE PARTS LIST & INSTALLATION GUIDE



#### **PARTS INCLUDED**

- 1PC Compact Baffled Oil Catch Can
- **1PC** Application-Specific Mounting Bracket
- **2PC** Direct-Fit Hoses
- 1PC 3/8" Aluminum Barbed Fitting
- 1PC 1/2" Aluminum Barbed Fitting
- **1PC** PVC Adapter Fitting
- **5PC** Spring Clamps Mounting Hardware

#### **TOOLS NEEDED**

10mm Socket 12mm Socket 13mm Socket 3/8" Drive Ratchet & Extension 17mm Wrench Torque Wrench Pliers

# INSTALL TIME 3 Hours INSTALL DIFFICULTY 2000 DISCLAIMER

- Allow vehicle to cool completely prior to attempting installation.
- Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products.
- Mishimoto suggests that a trained professional install all Mishimoto products.

#### **INSTALL PROCEDURE**

- 1. Disconnect the negative terminal on the battery.
- 2. Lift the engine cover off the engine.

**Note:** There are two methods for performing this installation. The simplified version begins after Step #30. However, we recommend reviewing all the steps in this guide. This simplified method

- does require modification of your stock PCV hose.
- Disconnect the electrical harnesses on the intake manifold. There are three total to disconnect. Depress the black tabs at the center to release the connections.



4. Remove the bolt on the bracket that holds the bottom sensors. (1x 10mm bolt)



 Remove the bolt on the bracket that holds the coolant line to the intake manifold. (5x 10mm bolts)



6. Remove the bolts that secure the coil pack wire cover to the valve cover. (2x 10mm bolts)

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Remove the bolt that secures the vacuum line to the intake manifold. (1x 10mm bolt)



8. Separate the positive terminal on the alternator. (1x 12/13mm nut)



9. Remove the bolts that secure the intake manifold. (6x 12mm bolts)



10. Separate the cold-side pipe and coupler from the throttle body. (2x worm gear clamp)



11. Slide the intake manifold forward to reach the clamp on the PCV hose.



12. Remove the other end of the PCV hose from the valve cover. (1x spring clamp)



- 13. Feed the longer hose from your kit to the intake manifold port. Use the straight end for this step. (1x spring clamp)
- 14. Replace the intake manifold and place all bolts in their original locations at finger tightness.
- 15. Tighten the bolts in the order shown here and torque them first to 18.6 N.m (13.7 lb-ft) then go back and tighten to 23.5N.m (17.4 lb-ft) following the same order. (6x 12mm bolts)

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- 16. Replace the alternator positive wire and nut. (1x 12/13mm nut)
- 17. Reinstall all brackets that hold the connectors and other components to the intake manifold. (7x 10mm bolts)
- 18. Reinstall the coil pack wire cover to the valve cover. (2x 10mm bolts)
- 19. Reconnect all electrical connectors on the intake manifold.
- 20. Remove the nut that secures the bracket on the passenger-side shock tower. (1x 10mm nut)



21. Place the catch can bracket over the studs. Secure it with the provided hardware. (2x 10mm nuts)



22. Attach the fittings to your catch can. The small fitting goes to the IN port, and the large fitting to the OUT port. Snug them down with a

- 17mm wrench.
- 23. Secure the catch can to the bracket. (3x 2.5mm Allen bolts)
- 24. Attach the 90° end of the shorter hose to the valve cover. (1x worm gear clamp)



- 25. Attach the other end of the hose from the valve cover to the inlet port on the catch can. (1x worm gear clamp)
- 26. Attach the other end of the hose from the intake manifold to the outlet port on the catch can. (1x worm gear clamp)



- 27. Tighten all clamps on your hose connections.
- 28. Replace the cold-side coupler/pipe. (2x worm gear clamps)
- 29. Replace the engine cover.
- 30. Reconnect the battery.

The following are optional steps for those who do not want to remove their intake manifold. Mishimoto has supplied an adapter fitting that must be used for this installation option.

Disclaimer: These steps have been shown outside of the engine bay. The customer must perform these steps with the stock PCV line still attached to the vehicle.

1. Locate the adapter fitting and two clamps in your kit.

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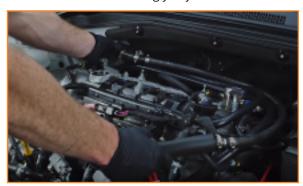




- 2. Find the PCV line where it enters the valve cover.
- 3. Cut and remove the 90° elbow off the stock PCV line. Cut just after the 90° section where it starts to go straight again.



- Place the smaller side of the fitting into the stock PCV hose. (1x worm gear clamp)
- 5. Mark and cut the Mishimoto hose that comes from the outlet port on the catch can where it intersects with the fitting you just added.



6. Attach the Mishimoto hose to the fitting on the stock PCV hose. Secure it with a clamp. (1x worm gear clamp)

Congratulations! You have finished installing the Mishimoto 2019+ Hyundai Veloster Turbo Direct-Fit Baffled Oil Catch can Kit, PCV Side.