

## VCM PERFORMANCE VE OTR MAF-Version

Installation of the VCM Performance VE Over The Radiator should take no more than 20-minutes when using the right tools.

Parts included in the kit are below;

Item Description	QTY	Photo
HOUSING, FILTER, OTRCAI, NA	1	
COUPLING, FLEXIBLE, HOUSING-MAF	1	
COUPLING, FLEXIBLE, MAF-THROTTLE BODY	1	
FILTER, PANEL, K&N	1	
BRACKET, RADIATOR, LEFT SIDE	1	
BRACKET, RADIATOR, RIGHT SIDE	1	
VALVE, DRAIN	1	
CONNECTOR, ENGINE-VENT	3	
WASHER, BRACKET, RADIATOR	2	
TUBE, VENT, ROCKER-COVER TO AIR-BOX	1	
CLAMP, HOSE, WORM DRIVE, 91-114mm	3	
CLAMP, HOSE, WORM DRIVE, 168-190mm	1	



Standard VE Engine Bay



Remove Engine Cover



Unplug MAF Loom





Remove breather pipe from resonator.



Loosen and remove screw clamp on throttle body.



Loosen and remove screw clamp on MAF-meter - Airbox side, and disconnect from airbox.



Loosen and remove screw clamp on MAF-meter, Resonator side, and disconnect from resonator.



Loosen factory airbox grounding bolts, and remove factory airbox.



Insert flat head screwdriver into slot to raise radiator support bracket.



Lightly raise locking wedge out of position to free radiator support.



Lift up top part of radiator support.



Loosen and remove 10mm bolt holding lower part of radiator support in place.





Raise lower part of radiator support.



Using pliers, disconnect the wires connected to the lower support before removal.



Remove 10mm bolt supporting A/C condenser



Use washers provided and place in factory hole



Washer in position



Use 10mm screw from lower radiator bracket for OTR brackets, on both sides. These brackets will lean the radiator for OTR fitment.





Push brackets to their outer most position (away from midline of car) using your hands, before hand tightening.



Tighten top bolts holding radiator 'lean' brackets in place.



Using original 10mm bolts, holding A/C condenser onto radiator, screw the OTR radiator lean brackets into factory position. Now the bolt will go through the OTR bracket, the A/C condenser support, and into factory radiator bolt hole.



The following photo shows the position of the brackets with respect to the front of the car.



This photo shows the parts included in the OTR box for MAF fitment.



Fit MAF adaptor to MAF and tighten hose clamps, ensuring clamp is on the appropriate side.



Fit the MAF coupling, attaching MAF to OTR housing with the larger screw clamp. This process can be time consuming .



Shape and tighten the screw clamp to the OTR housing.





Fitment should be as shown below.



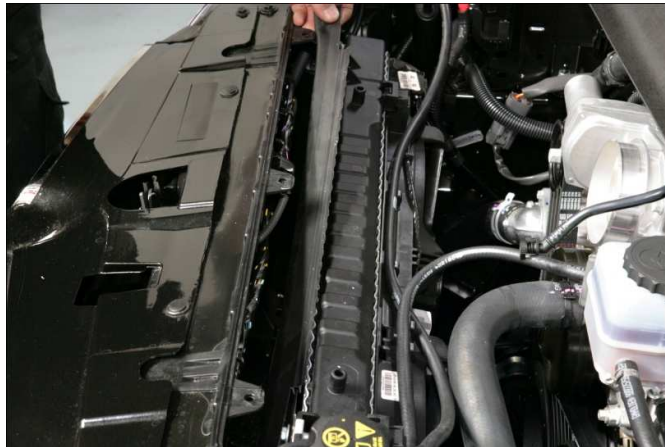
Fit Throttle Body to MAF adapter



Secure with screw clamp. Note: for neatness ensure clamp head is in correct position



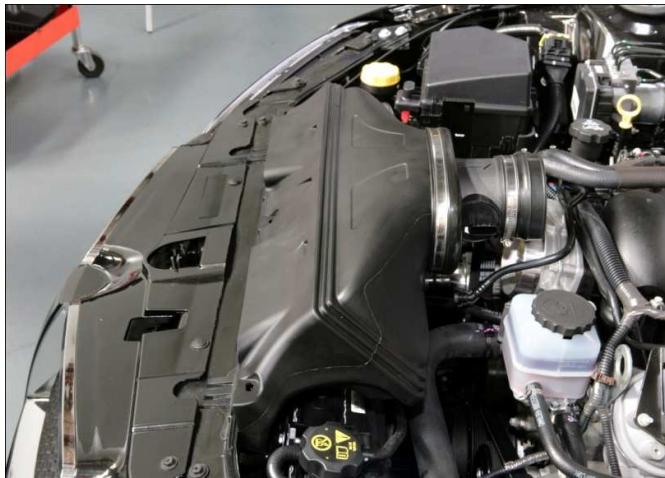
Remove rubber strip from the top of the A/C condenser



Place OTR in position, line up holes to factory locators



Gently slide the OTR into position, using the space provided by the new radiator supports.



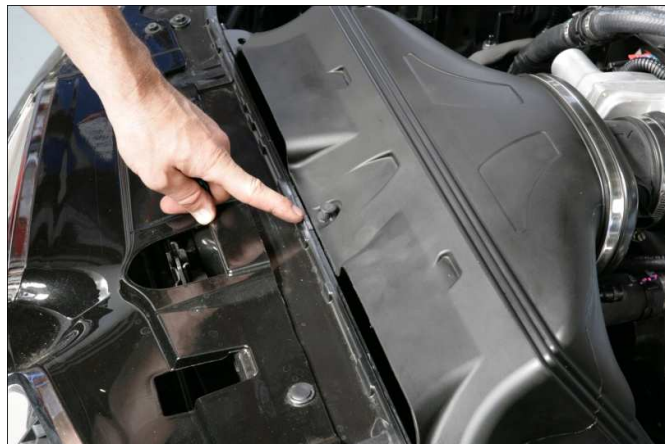
Once lined up, slide MAF coupling over throttle body.



Use screw clamp to secure MAF coupling to throttle body. Again, for neatness, review the position of the screw clamp end.



Using push clips provided, install into position along the front of the OTR, and press to secure. If not fully located, gently push side until clip pushes home.





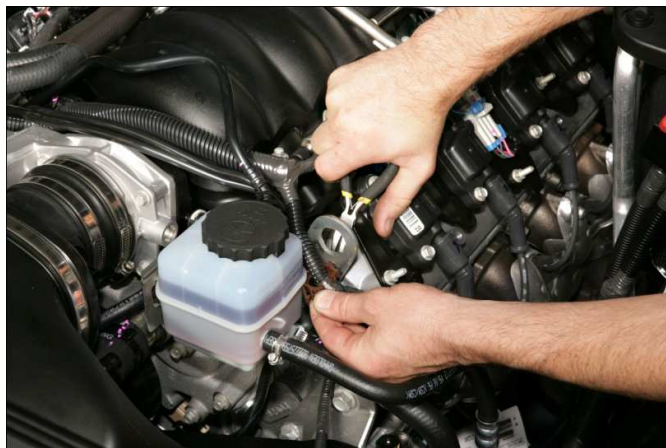
Reconnect factory breather hose to rocker cover, if having removed it for ease of fitment. Now carefully push alloy pipe closer manifold.



This hose will just click back into position with minimal force.



Using pliers, remove connector holding MAF wiring in place. This will assist the loom in reaching the MAF in its new position.



Locate MAF wiring loom between power steering reservoir and bracket to allow the plug to reach MAF



Route MAF wiring as shown in photo below



Finished product is an OEM, high quality OTR, capable of supporting high HP engines.



Thank you for purchasing a VCM-Performance product.