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SUZUKI LTR450 06-09 VORTEX EFI INTERCEPTOR & MAP KEY INSTALLATION INSTRUCTIONS

Thank you for purchasing the VORTEX EFI INTERCEPTOR. We hope you will enjoy the benefits of our product. Please follow the below installation instructions carefully.

Step 1: Remove the Bike's seat, Front & Rear plastic shroud, battery cover. Unbolt the petrol tank at the rear two mounting points. Gently lift the tank at the rear and prop something under it to allow enough room to get your hands in to access the TPS and Injector connectors.



Step 2: Mount the EFI Interceptor on top of the black plastic above the silencer using the Velcro strip provided. **Note:** Clean the plastic surface with alcohol before applying the Velcro.

Step 3: Route the main Vortex wiring harness down the left hand side of the airbox towards the left side of the throttle body. Continue the Black ground wire inside the frame down to the battery ground terminal. (Labelled "BAT GND")

NOTE: THIS BATTERY GROUND CONNECTION IS VERY IMPORTANT. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EFI INTERCEPTOR.

Step 4: Unplug the white 2 Way connector from the fuel injector. This requires the two locking tabs on either side to be pressed inwards before removal. Take note of the wire positions on this connector. Looking at the rear or wire entry side of the connector housing with the keyway section to the top the orange wire is in the RHS position.

Remove the white connector housing from the wires terminals as follows:

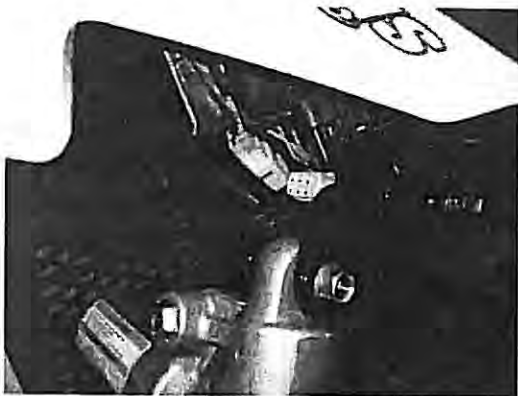
a/ Remove the blue lock inside the connector housing by gently levering it out.

b/ Using a fine pick (pointed tool) to get inside the housing, lift each of the wire terminal locking tabs whilst gently pulling on each (orange and grey) wire to remove the terminals from the White 2 way housing. **NOTE: THIS WHITE 2 WAY HOUSING IS NO LONGER USED.**

Step 5: The 2 wire terminals from the previously removed white housing must now be placed into GREY 2 Way housing provided with the EFI Interceptor. The terminal and wire can only be inserted one way and should slide in easily then click into position as the internal locking tab engages. Check that the wires are in their correct location in the Grey housing (ORANGE wire to the RHS and GREY wire to the LHS looking from the wire entry side of the housing with the locking clip to the top. Next lock the terminals in place by pushing the orange plastic lock all the way into the housing. This Grey 2 way connector should now be on the main bike harness where original White injector connector was. Now plug the 2 Way Grey Male connector from the EFI Interceptor "ECU-INJ" loom into this connector.

Step 6: Plug the white 2 way connector coming from the Vortex EFI Interceptor “**INJECTOR**” onto the bikes Fuel Injector.

Step 7: Locate the 3 way Grey Throttle Position Sensor (TPS) connector on the LHS of the Throttle Body and unplug it. **NOTE:** Press down the locking tab and gently pull on the connector body to unplug. Locate the mating Black Male 3 way connector from the Vortex EFI Interceptor “**TPS**” and plug this into the Grey TPS Connector. Plug the other Black female connector from the Vortex loom back onto the TPS Sensor on the Throttle body. **Note** the purpose of this connection is to tap into the TPS input (Yellow wire) to the ECU.



Step 8: In order for the EFI Interceptor to work correctly the “**MAP KEY**” must be intalled onto the main harness 6 way white connector located above the RHS Shock mount. Remove the black rubber cap and plug on the VORTEX “**MAP KEY**”. This MAP KEY signals the bikes ECU (Engine Control Unit) to run correctly with the VORTEX EFI INTERCEPTOR installed.

Step 9: Use the zip ties provided to secure the loose wiring. Replace the petrol tank, battery cover, front and rear plastic shroud and seat. Installation of the EFI Interceptor is now **complete!**

EFI INTERCEPTOR SWITCH OPERATION

The EFI Interceptor comes pre-programmed with a fuel map which is designed to adjust the fuel mixture to match the increased air flow created by the addition of a free flowing silencer and air box lid removal. This corrected air/fuel ratio will maximise the engines performance. In addition, there are three switches which allow the adjustment of the VORTEX Fuel Map by a total of plus or minus 8% fuel. The three switches represent throttle openings from 0-33%, 34-66%, 67-100% respectively. Each of these throttle positions are represented over the entire RPM range of the engine.

NOTE: This is in some ways is similar to the traditional pilot, needle and main fuel circuit.

Switch 1 (0-33%) – Left hand side switch. (Pilot)

Switch 2 (34-66%) – Middle switch. (Needle)

Switch 3 (67-100%) – Right hand side switch. (Main)

As supplied the three switches are in the 5-5-5 position which is the VORTEX Fuel Map. This should be suitable to run with most Air box and Silencer modifications. If a switch number is decreased (position 4,3,2,1) then fuel within that switch range (e.g. 0-33% throttle opening) will be reduced by 2% per position to a maximum of minus 8% fuel. Alternatively if the switch number is increased (Position 6,7,8,9) the fuel will be increased by 2% per position to a maximum of plus 8% fuel. Position 0-0-0 for all three switches will be the same as the stock bikes map with the VORTEX “**MAP KEY**” installed.

INDEMNITY

Note: This is a performance product and is designed for competition use only. The manufacturer or their distributor accepts no responsibility for damage or injury caused by this product. Because we cannot control the application or use of this product, the buyer assumes all risks of any and all damage that may occur to their self, their machinery or third party due to the use of this product. The product is guaranteed against manufacturing defects.