



WAVE TUNE

Part # 309-362, -368-X

ThunderMax eXhaust Matched Series ECM

Thank you for purchasing a ThunderMax ECM! Please read through the following instructions before beginning the installation procedure. Following these instructions will ensure that the ECM is installed and setup properly for optimal results. If you have any problems or questions, please visit our website at Thunder-Max.com for additional guides and support information.

"DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES" The user shall determine suitability of the product for his or her use. Installation and use on a pollution-controlled vehicle constitutes tampering under the U.S. EPA guidelines and can lead to substantial fines. Review your application and check your local laws before installing.

***CA Proposition 65** "known to the state of CA to cause [cancer] [birth defects or other reproductive harm]" see www.p65warnings.ca.gov for details

Step 1 Install the new ThunderMax ECM. Remove seat and both side covers. Push up on the bottom of the fuse box cover to remove the cover (located on the left side of the bike), then remove the ECM fuse from the fuse box.



Special Note – If you have previously installed another tuning device such as a Power Commander, be sure to remove the device and any "O2 Sensor Eliminators" that may have been installed at the sensor harness plugs at that time!

Step 2 Remove the factory ECM from the caddy by spreading the plastic caddy latches at the sides of the ECM. Lift the ECM up and to the right to release it from the caddy.



Step 3 Disconnect the ECM from the connector as per the following procedure:

Depress button on socket housing of the connector; rotate locking bar until it reaches the full rearward position (the index pin on locking bar will engage the rear



notch in the socket housing).

The connector internal latches are not fully disengaged until the locking bar on the connector is seated to the full rearward position to complete removal of the connector. If you force the socket housing with latches partially engaged, it will result in damaging the connector. Once index pin is fully seated, with steady yet careful attention, pull apart the connector from the factory ECM and remove it from the motorcycle.

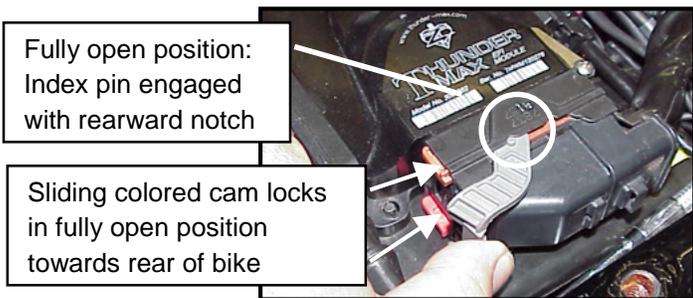
Step 4 If equipped with factory alarm, detach alarm antenna from ECM caddy clip by lifting slightly and sliding to the right of the bike – do not disconnect wiring.



Step 5 Install main harness connector to ThunderMax ECM. Before installing connector, lightly spread some dielectric grease (included in package) on harness connector terminals, and on the inside lip of the connector port opening of the ECM to allow the rubber weather seal in the connector plug to slide into place without binding. See 'Tips' on page 7 for additional dielectric grease instructions.



Before connecting, verify that the locking bar is in the fully open, rearward position (locking bar index pin is fully engaged with rear notch in the socket housing).



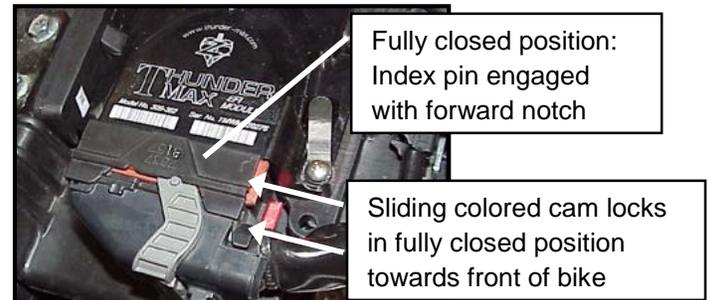
Fully open position:
Index pin engaged
with rearward notch

Sliding colored cam locks
in fully open position
towards rear of bike

Important Note: If socket housing with grounding pin are not properly aligned during connector installation damage to the grounding pin will likely occur, which will require you to return the ThunderMax ECM for repair to the damaged pin.

Rotate the locking bar forward to engage the connector. Observe that the colored cam locks are moving with the locking bar; proper execution will show both colored cam locks visible in equal amounts on the forward-facing side of the connector when the locking bar is in its fully seated position with the button lock engaged,

as in the image below (**do not force the locking bar**). Index pin will engage front notch in socket housing.

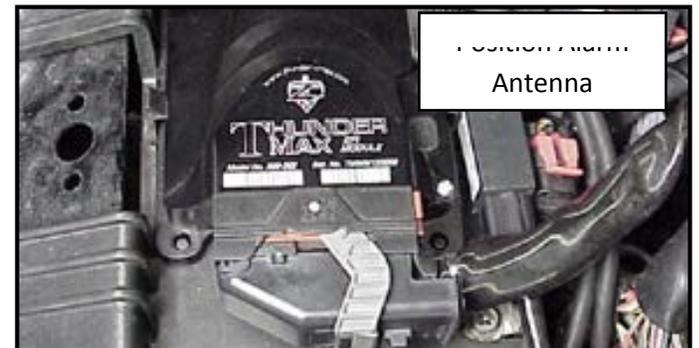


Fully closed position:
Index pin engaged
with forward notch

Sliding colored cam locks
in fully closed position
towards front of bike

Important Note: Pin and socket housing of the connector must be fully engaged before you rotate the locking bar to the forward position. Forcing the locking bar forward before the connector is fully engaged will damage the connector and/or the ECM

Step 6 Place the ThunderMax ECM into the ECM caddy. If equipped, position alarm antenna as shown.



Alarm Antenna

Step 7 Re-install the ECM fuse and go to Part 2 Software / setup to complete the install. Replace the side covers and seat, when completed.

This product is upgradeable

The XMS series is designed specifically for a stock HD 96 or 103" engine with a high flow air cleaner assembly with a specific exhaust.

Later you decide to do any other performance upgrades to your engine, the XMS series by ThunderMax is upgradeable to the same functionality as the ThunderMax Wide Band Autotuning system. For more information check with your place of purchase or contact ThunderMax support @ tmaxsupport@thunder-max.com.

Continue To Part 2 Software / Set up Guide for Instructions on finalizing your install with Map loading and speedo calibration verification. Look for your engine size with NB or HNB next to it, then match the rest of components as close as possible.