

# 2015 KTM RC390



## *Supplementary Manual* Healtech QSE-1 + QSH-F2A



- 1. Remove the seat**
- 2. Remove the battery cover by pulling the cable release under the seat**
- 3. Remove the fuel tank cover:**
  - 1. Remove the fairing & cover fasteners indicated (4 per side)**



- 2. Remove the fasteners that are the forward mounting posts for the seat**
- 3. Remove the seven (7) fasteners mounting the fuel cap and temporarily set the fuel cap aside**
- 4. Gently pull the upper fairing edge away from the tank cover**
- 5. Pull the sides of the tank cover outward, freeing the four grommets (two per side) from the posts they engage**
- 6. Lift the tank cover up and away**
- 7. Place the fuel cap back in place on the tank to protect from debris**



- 4. Remove the battery**
- 5. Remove the two (2) fasteners mounting the aft fuel tank bracket to the frame**
- 6. Remove the two (2) nuts in the battery compartment that secure the front of the fuel tank**
- 7. Remove the small screw in the lower front part of the battery tray, allowing the tray to lift up**
- 8. Lift the fuel tank and move it forward and to the left to gain access to the fuel injector connector, which is located on the top of the throttle body facing forward.**

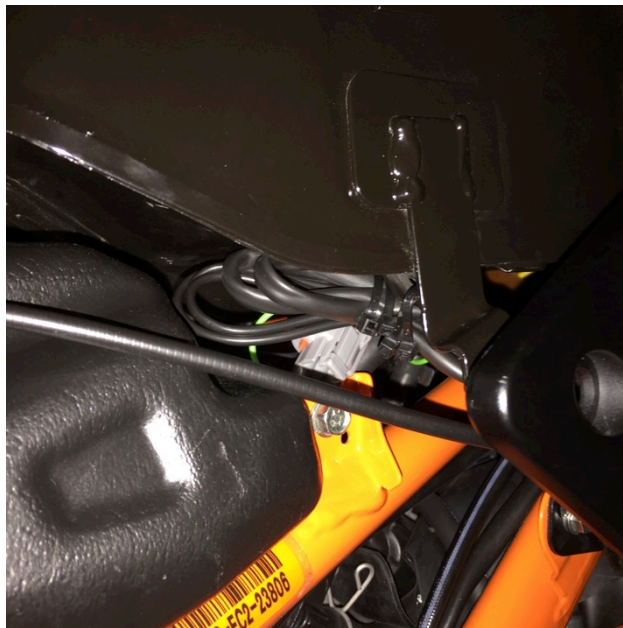


- 9. Unplug the original connector from the fuel injector and connect it to the mating plug on the QSH harness indicated by a red square. Connect the original fuel injector plug to the adjacent opposite gender QSH fuel injector connector. (Note: the two unused fuel injector connectors on the QSH harness may be connected together)**
- 10. Lay out the routing of the QSH harness. The main part will run forward, roughly along the path of the battery cover release cable, with the large connector ending up in front of the fuel tank near the battery cover latch.**
- 11. Place the fuel tank back into position.**

- 12. Connect the ground wire to a good nearby chassis ground as shown.**



- 13. Bundle the excess harness and secure it in an open space away from hot surfaces and sharp edges.**



**14. Mount the QSE-1 module to the front left corner of the fuel tank (or other suitable location) as shown. This position is limited by the length of the sensor cable; it is recommended not to finalize the position of any component until all are in place.**



**15. Mount the QSE sensor. Place the conical washers on either side of the sensor in this configuration: (O). Pay close attention to the routing of the sensor cable – it must be secure but with adequate service loop to allow free shifter arm motion and to prevent fatigue. For different mounting options refer to the sensor install guide.**



**16. Route the sensor wire upward inside the fairing to the QSE module. Secure in multiple locations to ensure it is away from sharp edges and hot surfaces, especially the exhaust. One path is to follow the overflow hose and use the clip on the inside surface of the fairing.**





- 17. Connect the sensor wire to the QSE module.**
- 18. Confirm all wire routing and start the engine. Make sure that it idles normally and that there are no errors displayed.**
- 19. Proceed with setup and programming per the QSE-1 install guide and the tips in the next section.**
- 20. Once setup is complete, reassemble all components in reverse order from removal, confirming safe placement of all components and harness routing away from hot surfaces and sharp edges.**

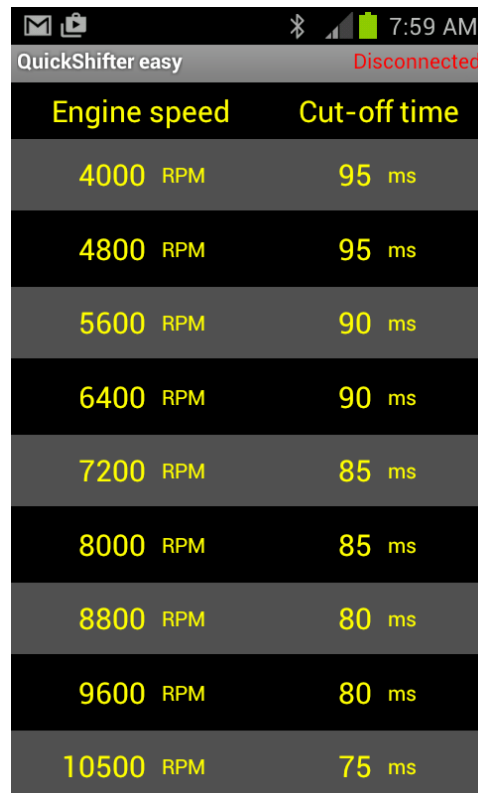
**You're ready to ride! Everything will function normally for downshifts and regular upshifts using the clutch.**



# RC390 Setup Tips

## Healtech QSE-1 + QSH-F2A

**For street use, start with the cut-off times shown, which are all 10ms longer than the default values.**



The screenshot shows the QuickShifter easy app interface. At the top, there is a status bar with icons for mail, clipboard, Bluetooth, signal strength, battery, and the time 7:59 AM. Below the status bar, the app name "QuickShifter easy" is displayed on the left and "Disconnected" on the right. The main content is a table with two columns: "Engine speed" and "Cut-off time". The table lists settings for various engine speeds from 4000 RPM to 10500 RPM, with corresponding cut-off times ranging from 95 ms to 75 ms.

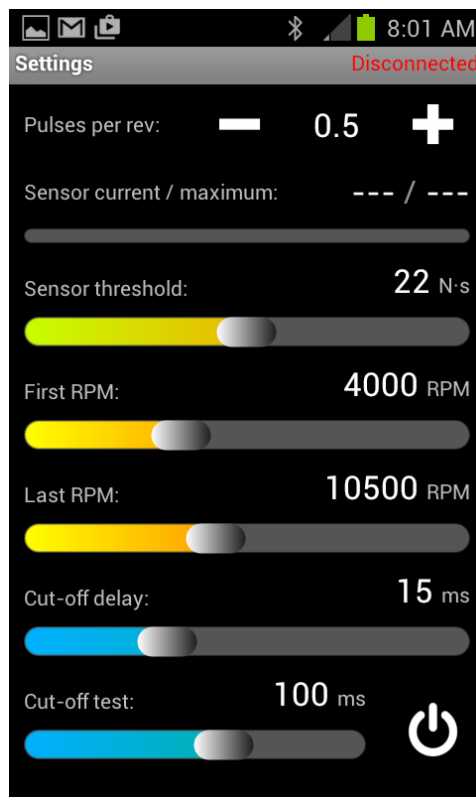
Engine speed	Cut-off time
4000 RPM	95 ms
4800 RPM	95 ms
5600 RPM	90 ms
6400 RPM	90 ms
7200 RPM	85 ms
8000 RPM	85 ms
8800 RPM	80 ms
9600 RPM	80 ms
10500 RPM	75 ms

**For track use it may be preferable to try shorter cut-off times. It is recommended that only experienced users go below the default values, and then only in very small increments for fine tuning.**

# RC390 Setup Tips

## Healtech QSE-1 + QSH-F2A

The following are typical settings for the 2015 KTM RC390.



**The sensor threshold is a critical setting and should be determined for your individual bike and style using the sensor logging procedure in the QSE-1 User's Guide.**