

# 2009-2010 Honda CRF450R

Installation Instructions





## **PARTS LIST**

- 1 Juice Box Pro™
- 1 USB Cable
- 1 Top Tune CD-ROM
- 1 Installation Guide
- 2 Velcro
- 1 Alcohol swab

# THE IGNITION MUST BETURNED OFF BEFORE INSTALLATION!

DOWNLOAD THE TOPTUNE SOFTWARE AND LATEST MAPS FROM OUR WEBSITE:

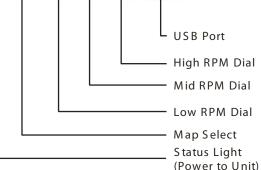
www.twobros.com

# PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

401 S. Grand Ave. Santa Ana, CA 92705 (800) 211-2767 www.twobros.com







Position 0	Zero map	
Position 1	Stock exhaust Stock air filter	2009 Honda CRF450R
Position 4	Stock exhaust Stock air filter	2010 Honda CRF450R
Position 5	Two Brothers slip-on Stock air filter	2010 Honda CRF450R
Position 6	Two Brothers full exhaust Stock air filter	2010 Honda CRF450R

#### Selecting the Map Position

The Juice Box Pro comes loaded with up to ten maps. Using a #1 Phillips screwdriver, turn the map select dial to toggle between the loaded maps. Refer to the map position table below for the maps included in your Juice Box Pro.

## Using the RPM Range Dials

The Low, Mid, and High RPM Dials refer to the RPM range, in thirds, of your vehicle. Each dial allows +/- 10% fuel adjustment on top of what fuel changes are done in the map. With the dial facing straight up, there is no additional fuel change. For example, if your vehicle revs to 15,000 RPM:

- the low RPM dial will adjust 0-5000 RPM
- the mid RPM dial will adjust 5001-10000 RPM
- the high RPM dial will adjust 10001-15000 RPM

#### Using Top Tune

Take your tuning to the next level with the Top Tune software.

#### Installing the Top Tune Software

- 1 Insert the CD provided into your computer's cd-rom drive. The launch program will run automatically.
  - If auto-run is disabled, double-click the My Computer icon then double-click the CD drive icon. Double-clickTBRTopTune.exe to manually start the CD.
- 2 Click Install Software and follow the on-screen instructions to install the Top Tune software. The Top Tune software and maps will be stored in C:\Program Files\TBR Top Tune.
- 3 Click Map Database. All maps will automatically be installed to the C:\Program Files\TBRTopTune\maps folder.

## Loading Additional Maps

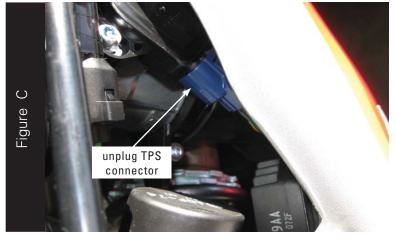
- 1 Connect the USB cable from the computer to the Juice Box Pro. Verify the cable is fully seated in the Juice Box Pro.
- 2 Run the Top Tune software by double-clicking the program icon installed on your desktop or on your start menu.
- 3 Click Open Map File and select a map file.
- 4 Click Send Map. You can send the map to any of the ten map positions.

## Altering Maps Using Top Tune

The values in the map represent a percentage of fuel change over stock. A value of 10 in the map indicates at that throttle position and RPM range the vehicle will be 10% richer than stock. If the value is -10, then it would be 10% leaner than stock. You have the ability to fine tune your fuel curve by altering these values. The Top Tune software allows a value of +250 to -100 in each cell.







- . Remove the seat.
- 2. Remove the fuel tank.
- 3. Remove the left hand side radiator cover
- 4. Unplug the stock wiring harness from the injector as shown in Figure A.

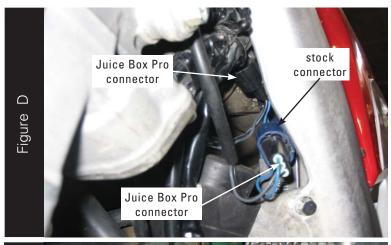
5. Attach the connectors from the Juice Box Pro to the stock injector and the stock wiring harness as shown in Figure B.

6. Locate the Throttle Position Sensor (TPS) connector.

The TPS connector is located on the left hand side of the throttle body to the inside of the frame.

**Note:** The MAP sensor uses this same connector and is located on top of the throttle body. Make sure you do NOT connect to the MAP sensor.

7. Unplug the TPS connector as shown in Figure C.



8. Attach the connectors from the Juice Box Pro to the stockTPS connector and the stock wiring harness as shown in Figure D.



9. Attach the ground wire from the Juice Box Pro to the stock ground location as shown in Figure E.

This is the mounting tab for the right side radiator.



- 10. Lay the Juice Box Pro on the left, inside of the frame, near the radiator.
- 11. Reinstall the fuel tank.

Verify the Juice Box Pro harness does not get pinched.

12. Using the supplied velcro, secure the Juice Box Pro to the fuel tank as shown in Figure F.

Make sure to clean both surfaces with the alcohol swab before attaching. Install the rubber plugs into the ports of the Juice Box Pro.

- 13. Reinstall the left hand side radiator cover.
- 14. Reinstall the seat.