



## 2008-10 Kawasaki KFX450R

### Installation Instructions



**JUICEBOX** PRO<sup>®</sup>  
Premium Fuel Controller

### PARTS LIST

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

**FOR RACE USE ONLY**

DOWNLOAD THE TOPTUNE SOFTWARE  
AND LATEST MAPS FROM OUR  
WEBSITE:

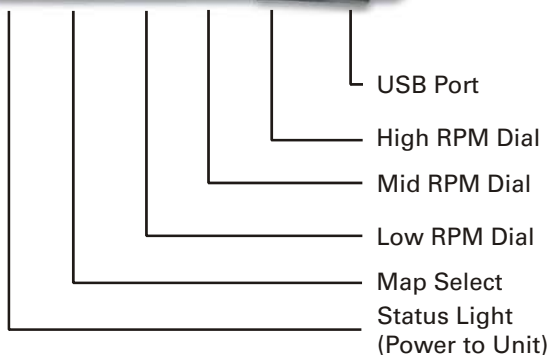
[www.twobros.com](http://www.twobros.com)

**PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION**

401 S. Grand Ave. Santa Ana, CA 92705  
(800) 211-2767 [www.twobros.com](http://www.twobros.com)

# JUICEBOX PRO<sup>®</sup>

Premium Fuel Controller



## 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-click TBR TopTune.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 TopTune.
- 3 Click Map Database. All maps will automatically be installed to the C:\Program Files\TBR TopTune\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 TopTune 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

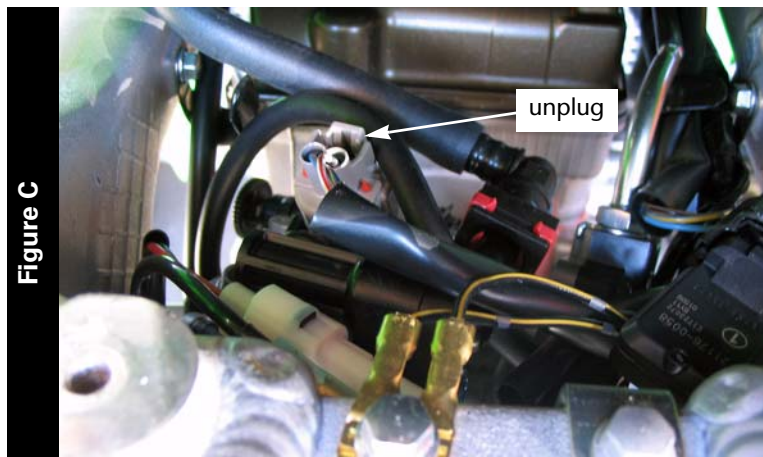
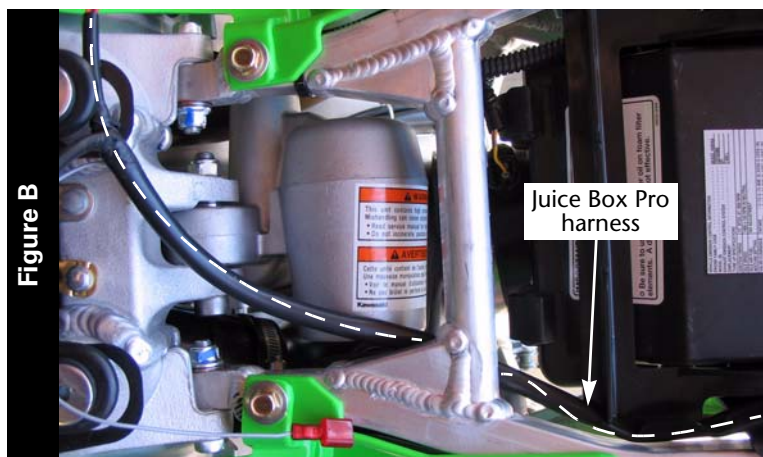
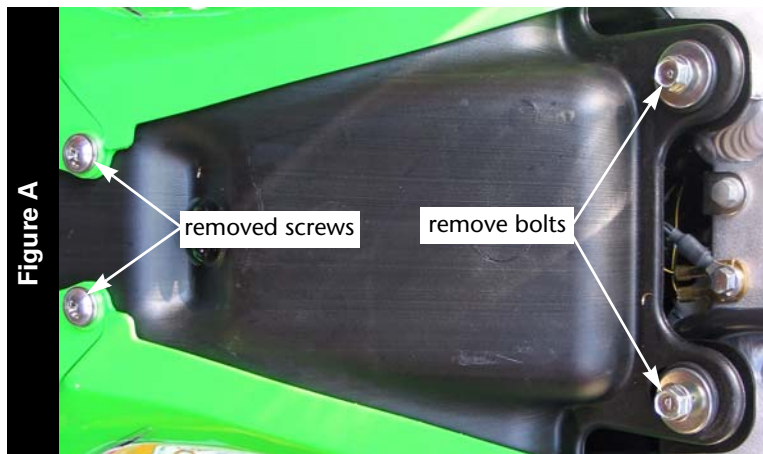
The values in the map represent a percentage of fuel change over stock. A value of 10 in the map indicates at that throttle position and RPM range the vehicle will be 10% richer than stock. If the value is -10, then it would be 10% leaner than stock. You have the ability to fine tune your fuel curve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

Position 0	Zero map	
Position 1	Stock exhaust Stock air filter	2008-2010 Kawasaki KFX450
Position 2	Stock exhaust - baffle insert removed Stock air filter Air box lid removed	2008-2010 Kawasaki KFX450
Position 3	Two Brothers slip-on exhaust (spark arrestor removed) Stock air filter	2008-2010 Kawasaki KFX450
Position 4	Two Brothers full exhaust (spark arrestor removed) Stock air filter	2008-2010 Kawasaki KFX450



**The ignition must be turned OFF before installation.**

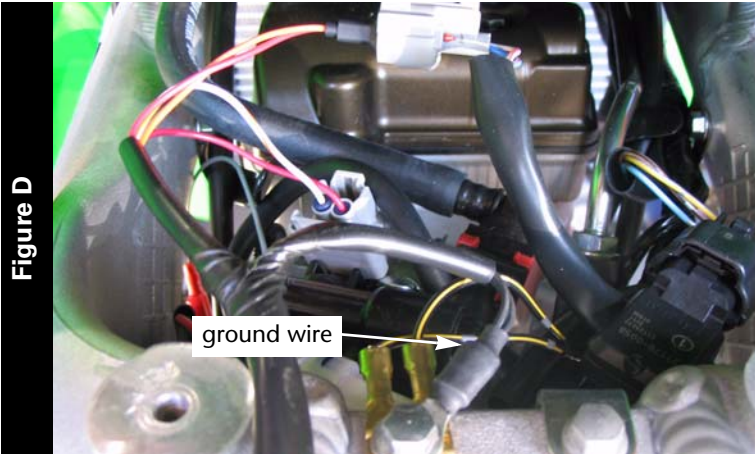
- 1 Remove the seat.
- 2 Remove the two screws securing the side covers to the fuel tank as shown in Figure A.
- 3 Remove the two bolts at the rear of the fuel tank as shown in Figure A.  
This allows the rear of the fuel tank to be raised up enough to install the Juice Box Pro.
- 4 Lay the Juice Box Pro in the tail section.
- 5 Route the wiring harness from the Juice Box Pro towards the throttle body.
- 6 Route the harness underneath the cross member of the sub-frame as shown in Figure B.



- 7 Unplug the stock wiring harness from the injector as shown in Figure C.  
This connection is under the rear of the fuel tank.

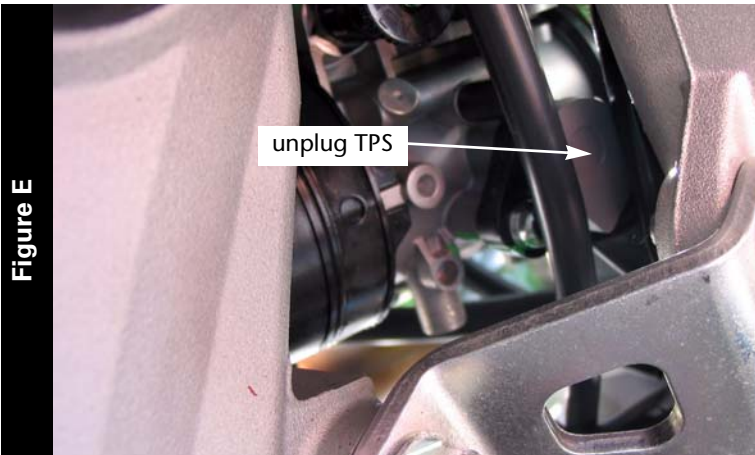


Figure D



- 8 Attach the Juice Box Pro wiring harness to the injector and the stock wiring harness as shown in Figure D.
- 9 Remove the bolt securing the stock ground wire to the frame.
- 10 Attach the ground wire from the Juice Box Pro to this same location as shown in Figure D.

Figure E



- 11 Locate the stock throttle position sensor (TPS) connector on the left hand side of the throttle body.
- 12 Unplug the stock wiring harness from the TPS as shown in Figure E. This allows access to the wiring harness.

Figure F



- 13 Crimp the supplied wire tap to the yellow/white wire as shown in Figure F.
- 14 Attach the grey wire from the Juice Box Pro to the wire tap as shown in Figure F.  
**Note:** It is recommended to use dielectric grease on both of these connections.
- 15 Attach the TPS connector to the throttle bodies.

Figure G



16 Remove the four bolts securing the tool kit in place as shown in Figure G.

Figure H



17 Using the supplied velcro, secure the Juice Box Pro to the rear fender as shown in Figure H.

Make sure to clean both surfaces with the alcohol swab before attaching.

**Note:** Due to the lack of storage room on this motorcycle, this is the best place to mount the Juice Box Pro. This will require removal of the stock tool kit.

18 Reinstall the tool kit with the four bolts removed earlier.

19 Lower the fuel tank back into position.

20 Reinstall the two bolts and screws removed earlier.

21 Reinstall the seat.