



2009-2010 Yamaha FZ1

Installation Instructions



JUICEBOX PRO[®]
Premium Fuel Controller

PARTS LIST

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

THE IGNITION MUST BE TURNED OFF BEFORE INSTALLATION!

DOWNLOAD THE TOPTUNE SOFTWARE AND LATEST MAPS FROM OUR WEBSITE:

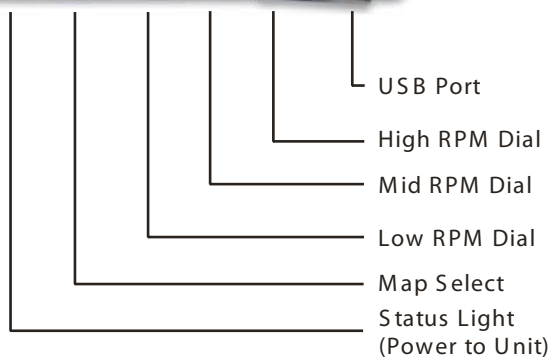
www.twobros.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

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

JUICEBOX PRO[®]

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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 TopTune

Take your tuning to the next level with the TopTune software.

Installing the TopTune 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 TopTune 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 TopTune

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 TopTune software allows a value of +250 to -100 in each cell.

Position 0	Zero map	
Position 1	Stock exhaust Stock air filter	2009-2010 Yamaha FZ1
Position 2	Two Brothers V.A.L.E slip-on Stock or aftermarket air filter	2009-2010 Yamaha FZ1

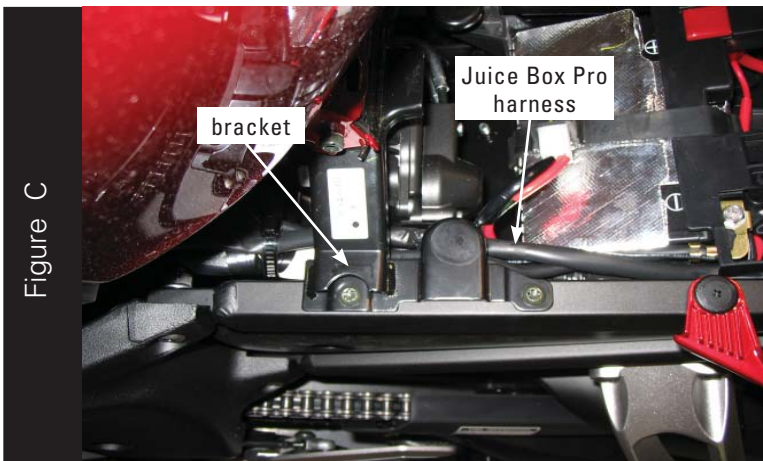
Figure A



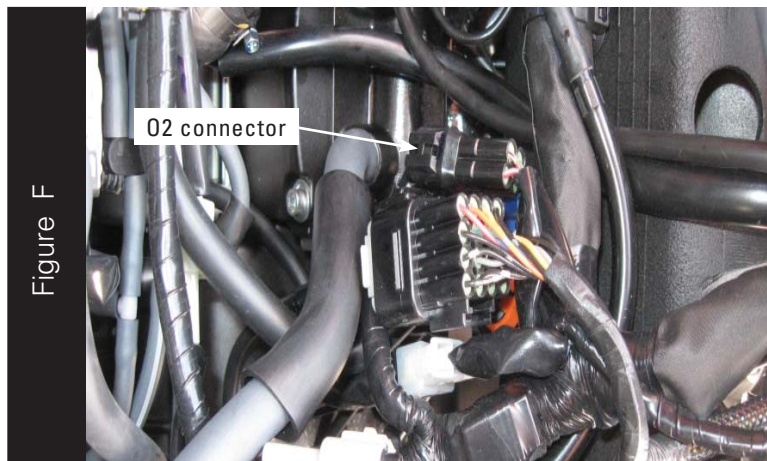
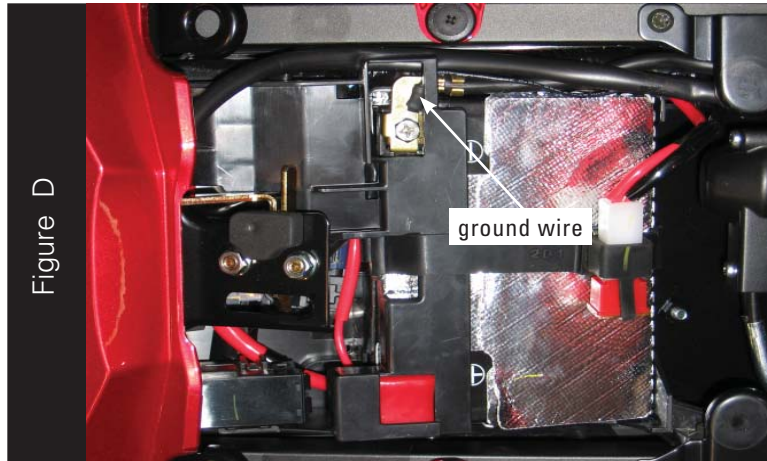
Figure B



Figure C



1. Remove the main seat and the passenger seat.
2. Prop the front of the fuel tank in the up position.
3. Temporarily lay the Juice Box Pro in the tail section.
4. Route the Juice Box Pro harness under the tail section and go towards the front of the bike.
5. Locate the grey connector from the main wiring harness to the injector rail and unplug this connector as shown in Figure A.
6. Attach the connectors from the Juice Box Pro to the stock wiring harness as shown in Figure B.
7. Remove the bolt on the left hand side of the fuel tank bracket.
8. Loosen the bolt on the right hand side of the fuel tank bracket enough to route the Juice Box Pro harness underneath it as shown in Figure C.
9. Re-tighten the bracket.



10. Attach the ground wire from the Juice Box Pro to the negative side of the battery as shown in Figure D.

11. Using the supplied velcro, secure the Juice Box Pro in the rear section of the trunk as shown in Figure E.

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

12. Verify the wires are routed properly.

13. Locate the stock O2 sensor in the exhaust. Follow the O2 sensor harness and unplug it from the stock wiring harness.

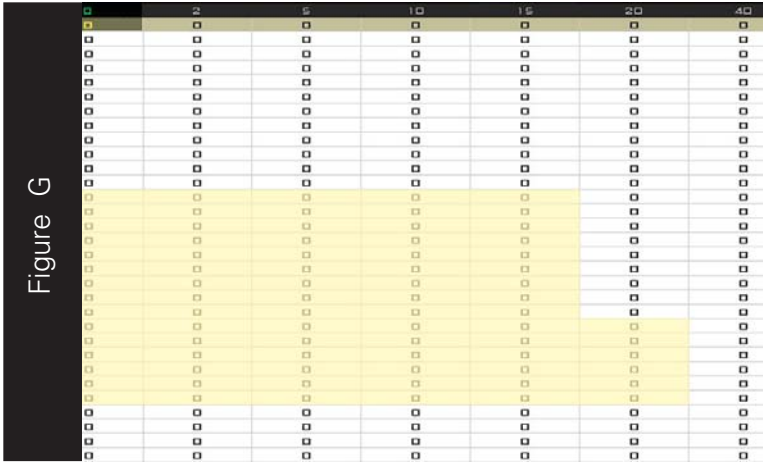
This is a black 4-pin connector next to the main throttle body connector.

14. Attach the connectors from the Juice Box Pro to the O2 sensor harness and the stock wiring harness as shown in Figure F.

15. Lower the fuel tank and verify the connectors and harness do not interfere with or get pinched by the fuel tank.

16. Reinstall the main seat and the passenger seat.

Figure G



The Juice Box Pro for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure F. The Juice Box Pro is designed to achieve a target AFR of 13.6:1. To use this Juice Box Pro you must retain your stock O2 sensors.

It is not necessary to input values in the highlighted area.