

# JUICEBOX®

## 2009-2010 BMW K1300S

Installation Instructions



### **PARTS LIST**

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

# FOR RACE USE ONLY

DOWNLOAD THE TOPTUNE SOFTWARE
AND LATEST MAPS FROM OUR
WEBSITE:

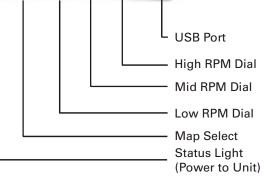
www.twobros.com

# 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	2009-2010
	Stock air filter	BMW K1300S
Position 2	Two Brothers slip-on	2009-2010
	Stock air filter	BMW K1300S

#### **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**

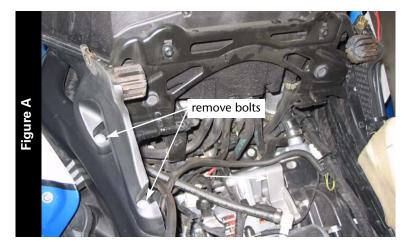
- 1 Insert the CD provided into your computer's cd-rom drive. The launch program will run automatically.
  - If auto-run is disabled, double-click the My Computer icon then double-click the CD drive icon. Double-click TBR Top Tune.exe to manually start the CD.
- 2 Click Install Software and follow the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

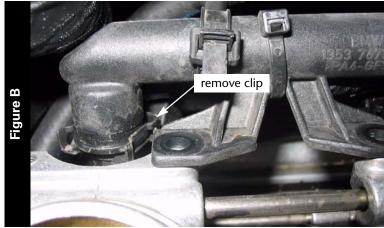
#### **Loading Additional Maps**

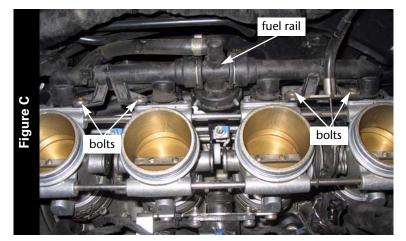
- 1 Connect the USB cable from the computer to the Juice Box Pro. Verify the cable is fully seated in the Juice Box Pro.
- 2 Run the Top Tune software by double-clicking the program icon installed on your desktop or on your start menu.
- 3 Click Open Map File and select a map file.
- 4 Click Send Map.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









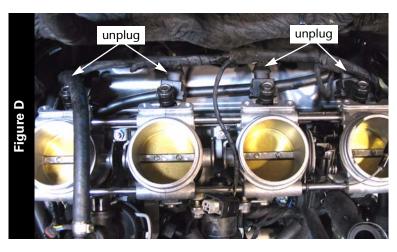
The ignition must be turned OFF before installation.

Do not turn on the ignition while any connections are unplugged.

- 1 Remove the following:
  - seat
  - upper side fairings
  - fuel tank
  - intake runners with filters
  - battery
  - air box, remove bolts as shown in Figure A
- 2 Access the injectors in one of two ways. Either remove the entire throttle bodies from the intake manifolds (recommended to replace hose clamps) or remove the fuel rail using the following instructions.
  - 2a Remove the clip from each injector to the fuel rail as shown in Figure B.

- 2b Remove the four bolts securing the fuel rail to the throttle bodies.
- 2c Remove the fuel rail.

**Note:**Leave the injectors in the throttle body. Do not lose the O-rings for the injectors.



3 Unplug the stock wiring harness from each injector as shown in Figure D.



Lay the Juice Box Pro in the tail section and route the harness down the right hand side of the bike towards the throttle bodies.

Attach the connectors from the Juice Box Pro to the stock wiring harness and the fuel injectors as shown in Figure E.

• orange wire connects to cylinder #1

• yellow wire connects to cylinder #2

• green wire connects to cylinder #3

• blue wire connects to cylinder #4



6 Locate the stock throttle position sensor (TPS) connector.
The TPS connector is on the right side of the throttle bodies as shown in Figure F.

7 Unplug the stock TPS connector and attach the Juice Box Pro harness.

**Note:**Removing the right hand fairing will make this step easier.





9 Reinstall the air box.

**Note:**Verify the Juice Box Pro ground wire is pulled towards the outside of the frame.

- 10 Route the Juice Box Pro ground wire along the stock ground wire.
- 11 Attach the ground wire from the Juice Box Pro to the negative side of the battery as shown in Figure G.



12 Using the supplied velcro, secure the Juice Box Pro in the tail section as shown in Figure H.

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

The Juice Box Pro can also be mounted under the black cover near the fuel tank cap.



- 13 Unplug the stock O2 sensor from the main wiring harness as shown in Figure I.

  The O2 sensor connector is located under the fuel tank near the ABS control. The O2 sensor will no longer be connected to anything. The sensor can be removed from the exhaust if desired.
- 14 Verify all the electronics are securely connected before trying to start the motorcycle.
- 15 Reinstall the fuel tank and bodywork.