2006-07 Yamaha R6

Installation Instructions

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
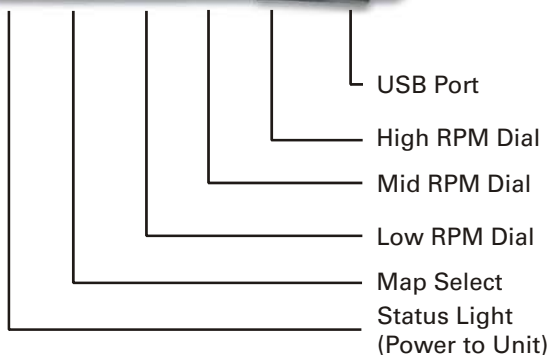AND LATEST MAPS FROM OUR
WEBSITE:
www.twobros.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

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

JUICEBOX PRO®
Premium Fuel Controller

USB Port

High RPM Dial

Mid RPM Dial

Low RPM Dial

Map Select

Status Light
(Power to Unit)

Position 0	Zero map	
Position 1	Stock exhaust Stock or aftermarket air filter O2 sensor disconnected	2006 Yamaha R6
Position 2	Two Brothers slip on exhaust Stock or aftermarket air filter	2006-2007 Yamaha R6
Position 3	Two Brothers full exhaust Stock or aftermarket air filter	2006-2007 Yamaha R6

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.
3   Click Map Database. All maps will automatically be installed to the C:\Program Files\TBR Top Tune\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.

Figure A

Juice Box Pro harness

fuel tank bracket

Figure B

unplug

Figure C

stock connector

stock connector
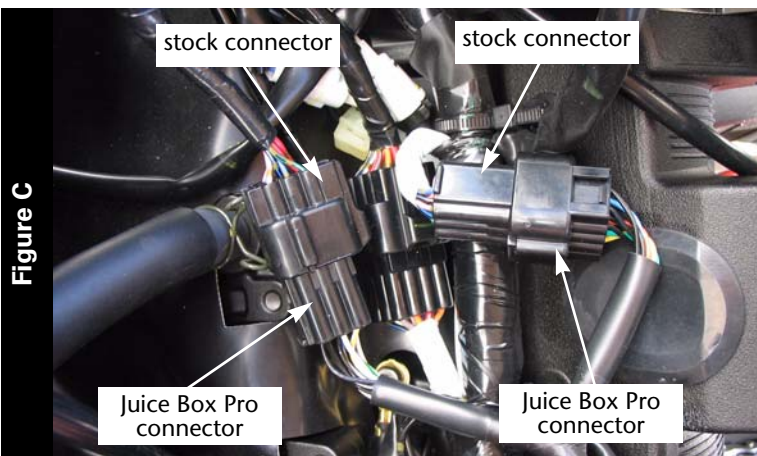
Juice Box Pro connector
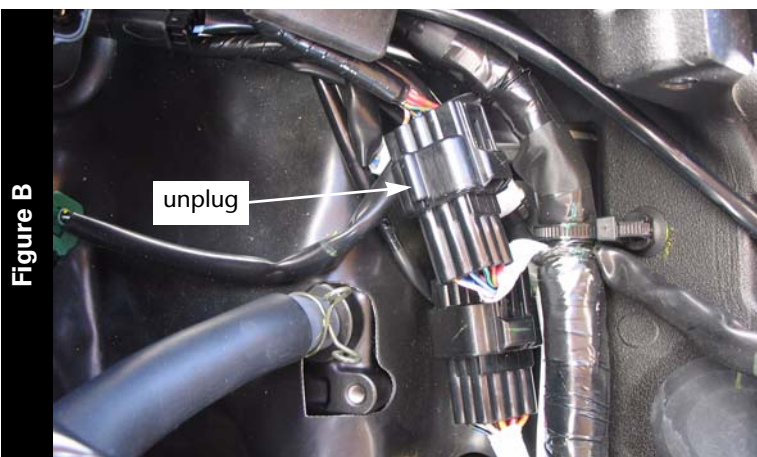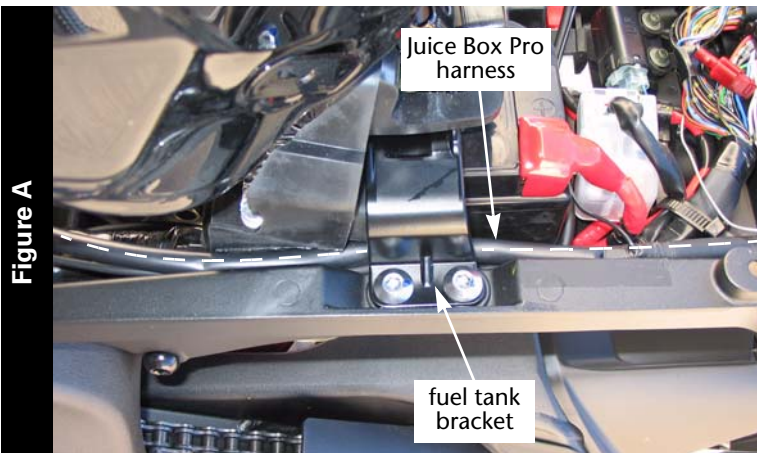
Juice Box Pro connector

⚠ WARNING
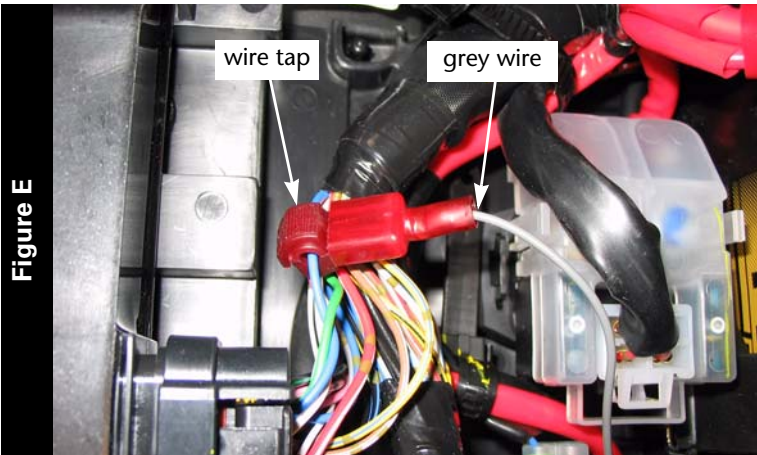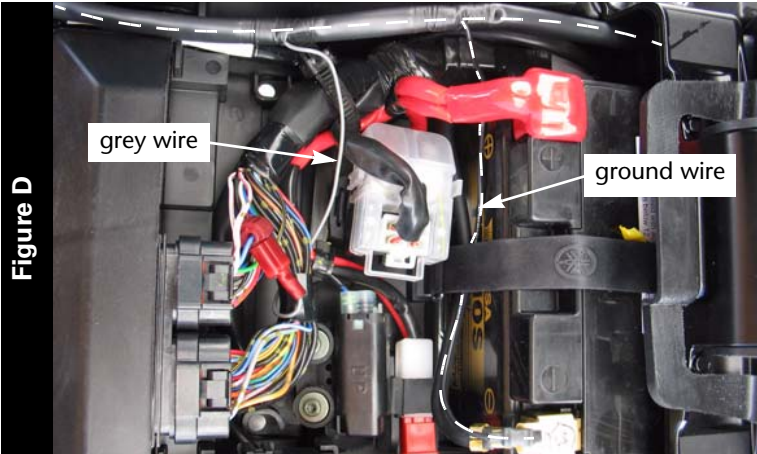
The ignition must be turned OFF before installation.

1. Remove the main seat.
2. Lift the front of the fuel tank up and use something to keep it propped up.
3. Route the Juice Box Pro harness down the left hand side of the bike.
4. Loosen the bolts securing the fuel tank bracket.
5. Route the Juice Box Pro harness underneath the fuel tank bracket as shown in Figure A.

   Once installation is complete, tighten the fuel tank bracket bolts.

6. Unplug the black 9-pin connector from the throttle bodies to the main wiring harness as shown in Figure B.

7. Attach the Juice Box Pro connectors to the stock connectors as shown in Figure D.
8. Verify these connectors do not interfere with the fuel line when the fuel tank is lowered back into position.

Figure D

grey wire

ground wire

Figure E

wire tap

grey wire

Figure F

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

10 Crimp the supplied wire tap to the blue wire of the ECU as shown in Figure E.

This wire is from the smaller of the two ECU connectors.

11 Attach the grey wire from the Juice Box Pro to the wire tap as shown in Figure E.

Note: It is recommended to use dielectric grease on both of these connections.

12 Using the supplied velcro, secure the Juice Box Pro on top of the ECU.

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

13 Tighten the bolts securing the fuel tank bracket.

14 Lower the fuel tank back into position.

15 Reinstall the main seat.

Tuning Notes

This bike uses a fly-by wire system therefore conventional tuning can not be performed for all RPM and throttle ranges.

The grey wire from the Juice Box Pro is attached to the throttle blade angle sensor of the throttle bodies which is not directly correlated to the throttle grip position. When setting the throttle position in the Top Tune software, we recommend on resetting only the closed position after the bike has completely warmed up. Use the arrow key (<) next to CLOSED to perform this step and then click OK. Do not try to set the OPEN position unless you are on a dyno and above 9000 RPM.

You will notice in the maps there are not detailed values below 9000 RPM at 100% throttle and below 7500 RPM at 60-80%. This is because the throttle blades will not open more than 60% below this RPM range no matter how much throttle input is given. Therefore this area can not be tuned.