



## 2008-10 CanAm Spyder

### 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 | Posi-tap           |

**FOR RACE USE ONLY**

DOWNLOAD THE TOPTUNE SOFTWARE  
AND LATEST MAPS FROM OUR  
WEBSITE:

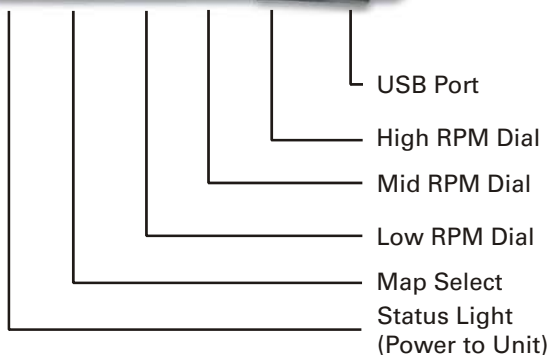
[www.twobros.com](http://www.twobros.com)

**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<br>Stock air filter           | 2008-2010<br>CanAm Spyder |
| Position 2 | Two Brothers slip-on<br>Stock air filter    | 2008-2010<br>CanAm Spyder |
| Position 3 | Two Bros. dual slip-ons<br>Stock air filter | 2008-2010<br>CanAm Spyder |

## **WARNING**

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

1 Remove the cosmetic covers on both the right and left sides as shown in Figure A.

2 Release the clips around the edge of the air box cover and remove the cover as shown in Figure B.

3 Remove the six bolts securing the air box base and remove the base as shown in Figure C.

Only four bolts are visible in Figure C.

4 Cut the three zip ties on the left side of the air box securing the wiring harness.

5 Pull the air box base out the right side.

This will allow access to the injector connectors.

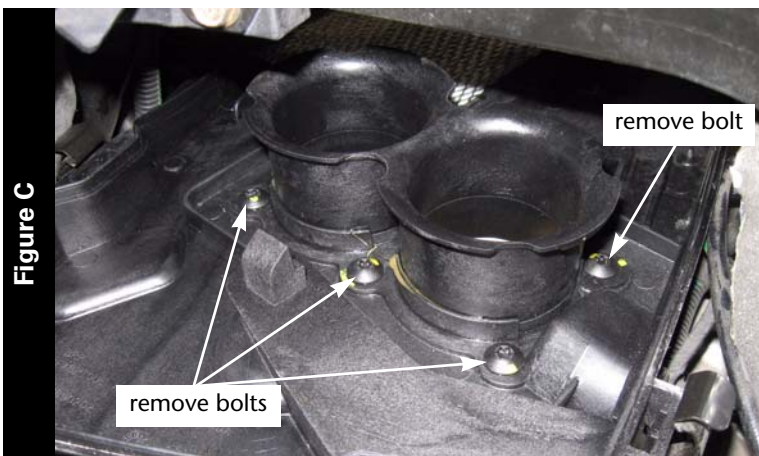
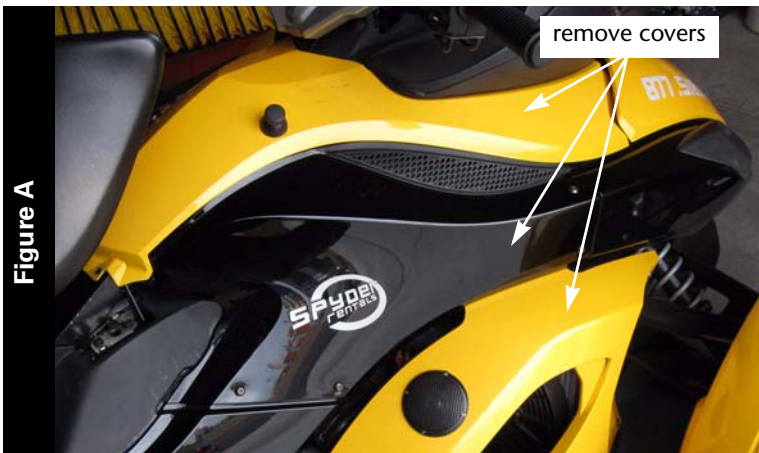


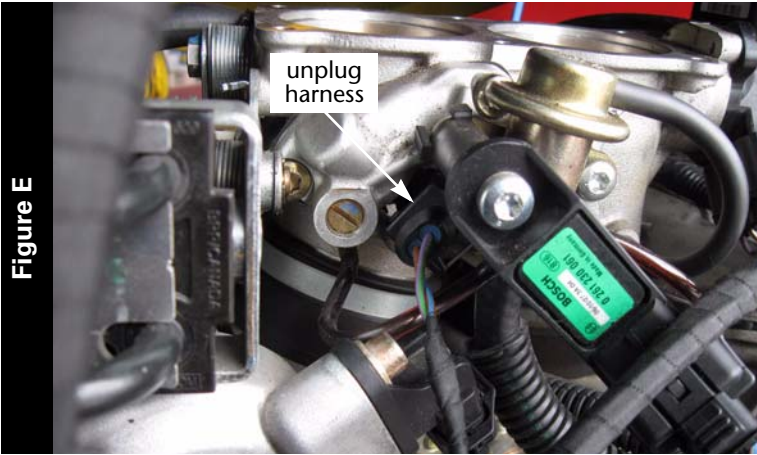


Figure D



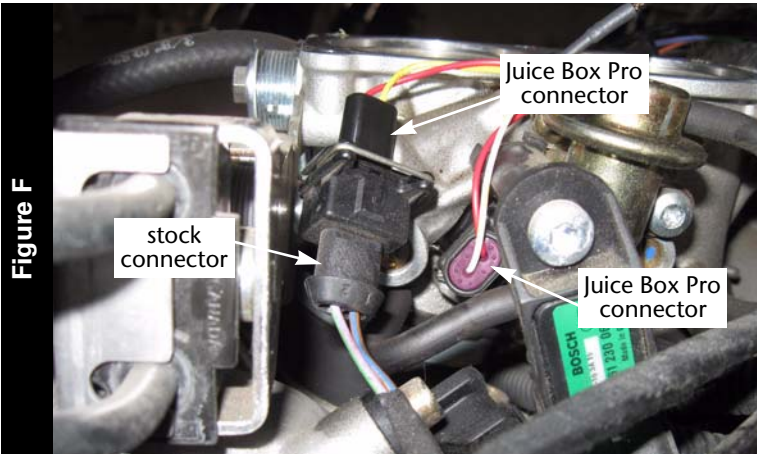
- 6 Using the supplied velcro, secure the Juice Box Pro in place next to the fuse box as shown in Figure D.  
The fuse box is located under the front storage hatch.  
Make sure to clean both surfaces with the alcohol swab before attaching.
- 7 Route the Juice Box Pro harness down the left side of the vehicle and go towards the throttle bodies.  
The harness will be secured in place in a later step.

Figure E



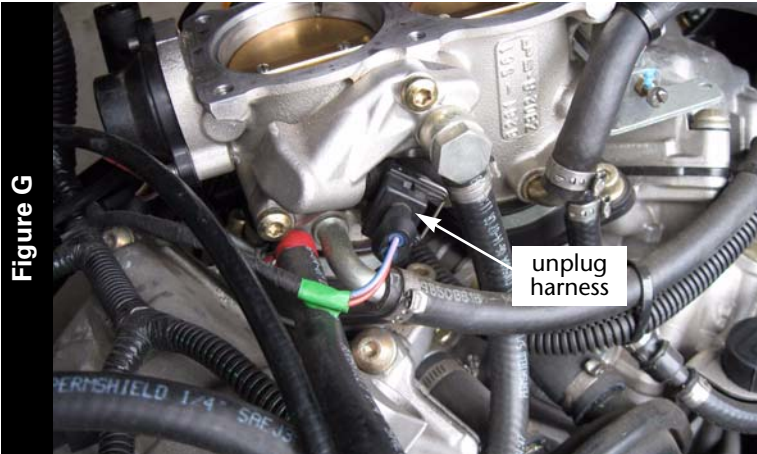
- 8 Unplug the stock wiring harness from the rear injector on the left side of the throttle bodies as shown in Figure E.  
To release the connector, squeeze the spring clip into the connector.

Figure F



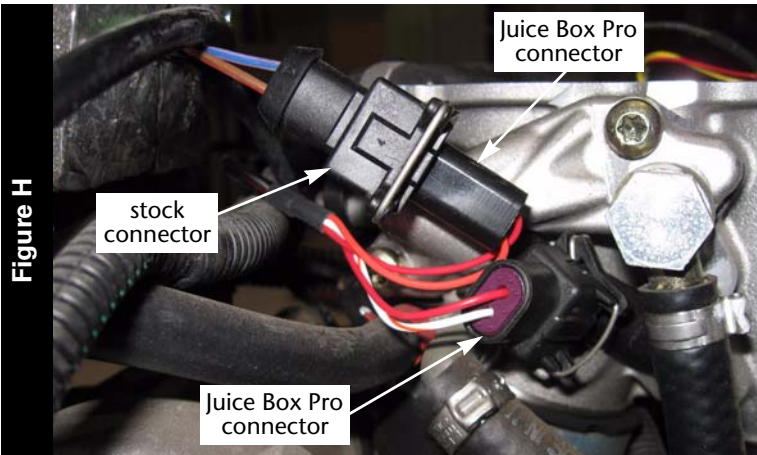
- 9 Attach the Juice Box Pro connectors with yellow wires to the rear injector and the stock wiring harness as shown in Figure F.

Figure G



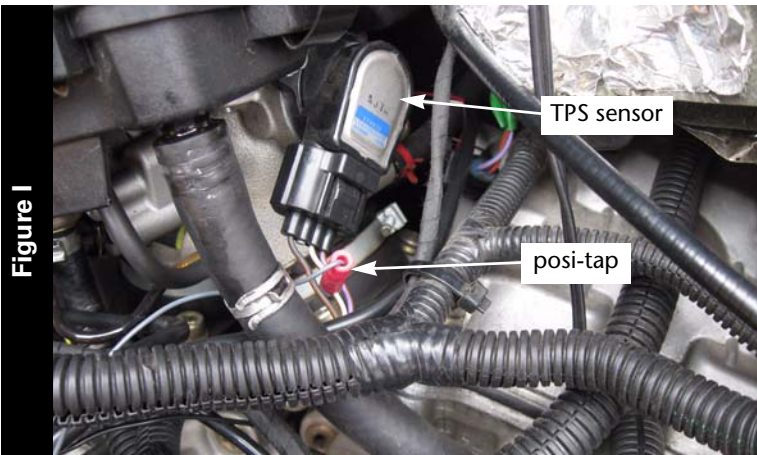
- 10 Unplug the stock wiring harness from the front injector on the right side of the throttle bodies as shown in Figure G.  
To release the connector, squeeze the spring clip into the connector.

Figure H



- 11 Attach the Juice Box Pro connectors with orange wires to the front injector and the stock wiring harness as shown in Figure H.

Figure I



- 12 Using the supplied posi-tap, attach the grey wire from the Juice Box Pro to the white/brown wire of the stock throttle position sensor (TPS) as shown in Figure I.  
The TPS is located on the left side of the throttle bodies.

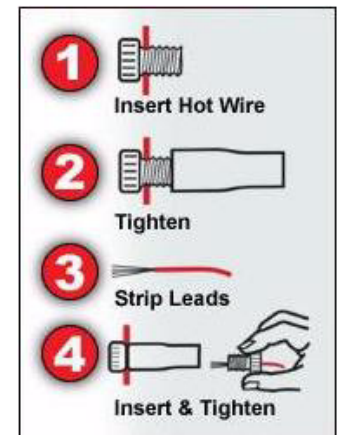
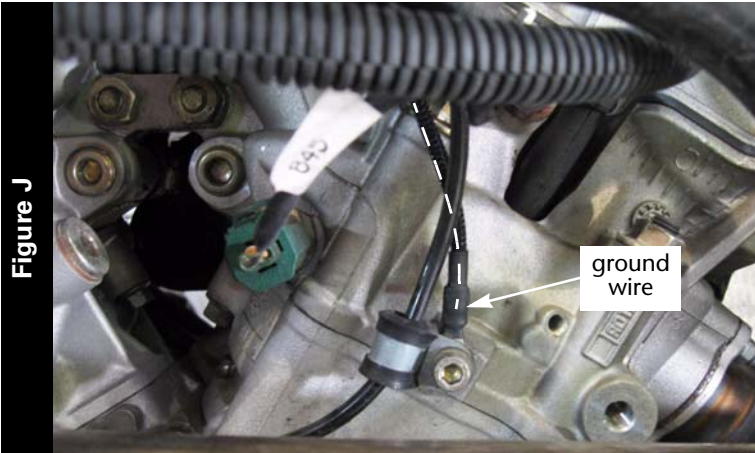




Figure J



13 Attach the ground wire from the Juice Box Pro to the rear cylinder head on the left side as shown in Figure J.

Remove the stock bolt and insert the bolt through the eyelet of the Juice Box Pro ground wire and reinstall the bolt into the head.

Figure K



14 Reinstall the air box.

15 Using the supplied zip ties, secure the Juice Box Pro harness along with the stock harness in the original location.

Figure L



16 Unplug the stock wiring harness from the O2 sensor as shown in Figure L.

This connection is located near the battery box. The inner tail section will need to be removed to access this connection.

17 Route the Juice Box Pro 4-pin connectors to the location shown in Figure L.

18 Attach the 4-pin connectors from the Juice Box Pro to the stock wiring harness and O2 sensor.

19 Reinstall the body work.

Figure M

|            |      | MAP 1 - CYLINDER 1,2 |   |   |    |    |    |    |    |     |     |
|------------|------|----------------------|---|---|----|----|----|----|----|-----|-----|
|            |      | THROTTLE (%)         |   |   |    |    |    |    |    |     |     |
|            |      | 0                    | 2 | 5 | 10 | 15 | 20 | 40 | 60 | 80  | 100 |
| ENGINE RPM | 500  | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 750  | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 1000 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 1250 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 1500 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 1750 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 2000 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0   | 0   |
|            | 2250 | 0                    | 0 | 0 | 0  | 0  | 0  | 6  | 3  | -2  | -3  |
|            | 2500 | 0                    | 0 | 0 | 0  | 0  | 0  | 4  | -1 | -6  | 0   |
|            | 2750 | 0                    | 0 | 0 | 0  | 0  | 0  | 4  | -4 | -14 | 1   |
|            | 3000 | 0                    | 0 | 0 | 0  | 0  | 0  | 0  | -2 | -15 | 1   |
|            | 3250 | 0                    | 0 | 0 | 0  | 0  | 0  | 6  | 4  | -2  | 7   |
|            | 3500 | 0                    | 0 | 0 | 0  | 0  | 0  | 8  | 5  | 4   | 11  |
|            | 3750 | 0                    | 0 | 0 | 0  | 0  | 0  | 3  | -1 | -4  | 0   |
|            | 4000 | 0                    | 0 | 0 | 0  | 0  | 0  | -1 | -9 | -5  | -3  |
|            | 4250 | 0                    | 0 | 0 | 0  | 0  | 0  | 2  | -2 | 1   | -2  |
| 4500       | 0    | 0                    | 0 | 0 | 0  | 0  | 8  | 2  | 2  | -5  |     |
| 4750       | 0    | 0                    | 0 | 0 | 0  | 0  | 9  | 4  | 4  | -1  |     |
| 5000       | 0    | 0                    | 0 | 0 | 0  | 0  | 13 | 7  | 7  | 3   |     |
| 5250       | 0    | 0                    | 0 | 0 | 0  | 0  | 15 | 10 | 5  | 3   |     |
| 5500       | 0    | 0                    | 0 | 0 | 0  | 0  | 15 | 8  | 6  | 2   |     |
| 5750       | 0    | 0                    | 0 | 0 | 0  | 0  | 17 | 8  | 5  | 3   |     |
| 6000       | 0    | 0                    | 0 | 0 | 0  | 0  | 13 | 9  | 7  | 3   |     |

The Juice Box Pro for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure M. 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 sensor.

It is not recommended to alter the values in the highlighted area unless instructed to do so by a Juice Box Pro technician.