



2006-07 Suzuki LTR450

Installation Instructions



JUICEBOX PRO[®]
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 | Rev Extension Plug |

FOR RACE USE ONLY

DOWNLOAD THE TOPTUNE SOFTWARE
AND LATEST MAPS FROM OUR
WEBSITE:

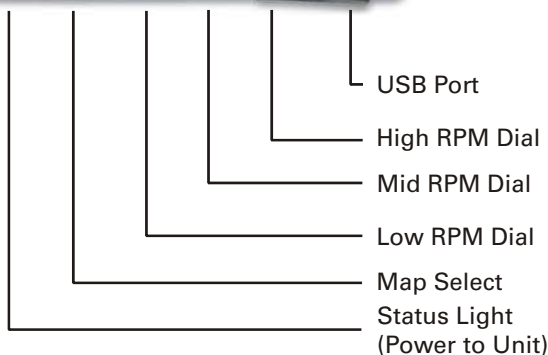
www.twobros.com

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



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

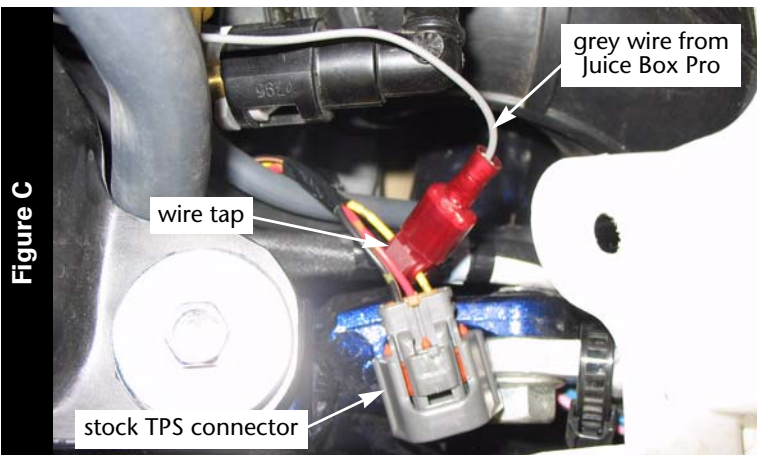
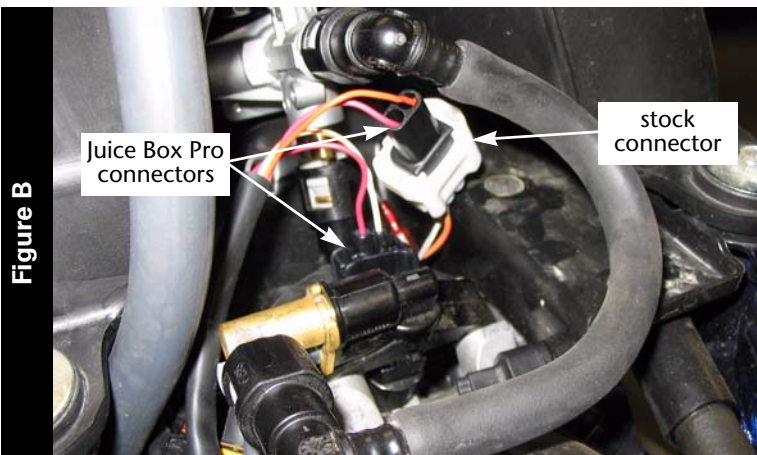
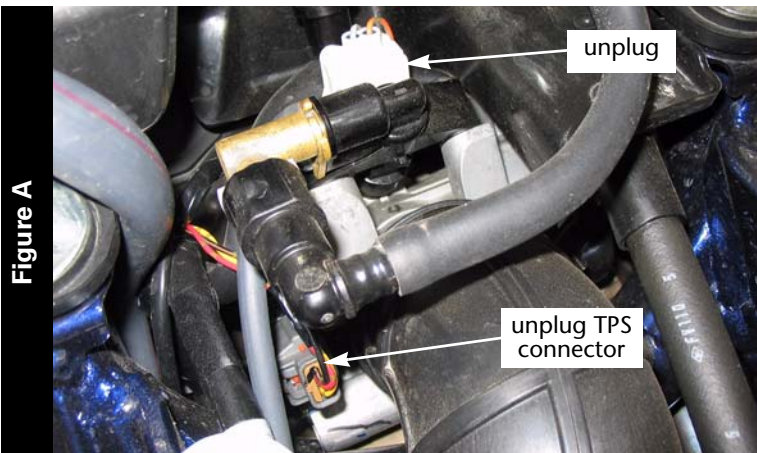
The values in the map represent a percentage of fuel change over stock. A value of 10 in the map indicates at that throttle position and RPM range the vehicle will be 10% richer than stock. If the value is -10, then it would be 10% leaner than stock. You have the ability to fine tune your fuel curve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

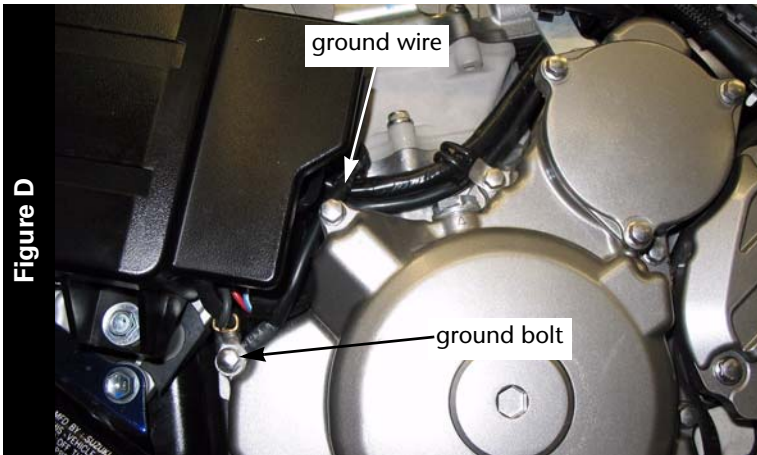
Position 0	Zero map	
Position 1	Stock exhaust Stock air filter	2006-2007 Suzuki LTR450
Position 2	Two Brothers slip-on Air box lid removed Stock air filter	2006-2007 Suzuki LTR450
Position 3	Two Brothers slip-on Stock air filter	2006-2007 Suzuki LTR450
Position 4	Two Brothers full exhaust Stock air filter	2006-2007 Suzuki LTR450
Position 5	Two Brothers full exhaust Air box lid removed Stock air filter	2006-2007 Suzuki LTR450

WARNING

The ignition must be turned OFF before installation.

- 1 Remove the seat.
- 2 Remove the plastic shroud around the fuel tank.
- 3 Lay the Juice Box Pro in the tail section.
- 4 Route the wiring harness from the Juice Box Pro towards the throttle body.
- 5 Unplug the stock wiring harness from the injector and the throttle position sensor (TPS) as shown in Figure A.
- 6 Attach the connectors from the Juice Box Pro to the stock wiring harness and the fuel injector as shown in Figure B.
- 7 Crimp the supplied wire tap to the yellow wire from the stock TPS connector as shown in Figure C.
- 8 Attach the grey wire from the Juice Box Pro to the wire tap as shown in Figure C. It is recommended to use dielectric grease on these connections.
- 9 Attach the TPS connector back to the throttle body.





- 10 Attach the ground wire from the Juice Box Pro to the common ground on the left hand side of the engine as shown in Figure D. Follow the stock wiring harness.



- 11 Using the supplied velcro, secure the Juice Box Pro to the rear fender as shown in Figure E.
Position the Juice Box Pro so it does not interfere with the foam pads on the bottom of the seat.
Make sure to clean both surfaces with the alcohol swab before attaching.
Note:The Juice Box Pro may also be installed inside the airbox if you are running with the airbox lid removed.
- 12 Locate the white 6-pin diagnostic connector behind the headlight.
This connector is covered with a rubber boot.
- 13 Attach the Rev Extension plug to this connector.
- 14 Replace the plastic shroud around the fuel tank.
- 15 Reinstall the seat.