

[POWER COMMANDER V]

FUEL AND IGNITION

**Can-Am Spyder
2011-2013 RT/RTS models &
2013-2014 RS/ST models**

Installation Instructions



PARTS LIST

- 1 Power Commander
- 1 USB Cable
- 1 Installation Guide
- 2 Power Commander Decals
- 2 Dynojet Decals
- 1 O2 Optimizer
- 4 Velcro strips
- 1 Alcohol swab
- 1 Posi-tap

**THE IGNITION MUST BE TURNED
OFF BEFORE INSTALLATION!**

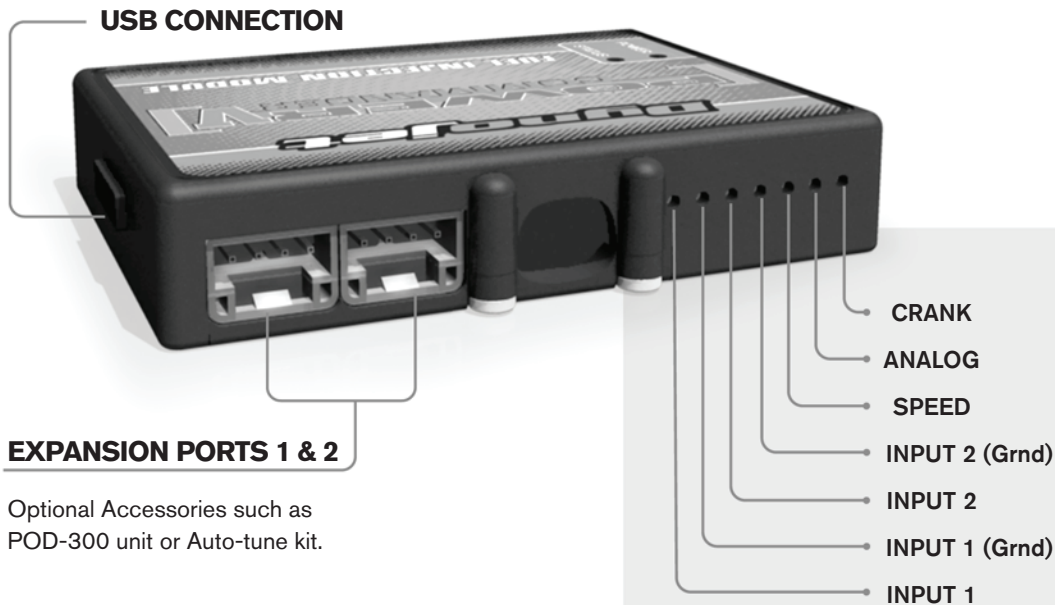
THE LATEST POWER COMMANDER
SOFTWARE AND MAP FILES CAN BE
DOWNLOADED FROM OUR WEB SITE AT:
www.powercommander.com

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

Dynojet

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 www.powercommander.com

POWER COMMANDER V INPUT ACCESSORY GUIDE



Wire connections:

To input wires into the PCV first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire strip about 10mm from its end. Push the wire into the hole of the PCV until it stops and then tighten the screw. Make sure to reinstall the rubber plug.

NOTE: If you tin the wires with solder it will make inserting them easier.



ACCESSORY INPUTS

Map -

(Input 1 or 2) The PCV has the ability to hold 2 different base maps. You can switch on the fly between these two base maps when you hook up a switch to the MAP inputs. You can use any open/close type switch. The polarity of the wires is not important. When using the Autotune kit one position will hold a base map and the other position will let you activate the learning mode. When the switch is "CLOSED" Autotune will be activated. (Set to Switch Input #1 by default.)

Shifter-

(Input 1 or 2) These inputs are for use with the Dynojet quickshifter. Insert the wires from the Dynojet quickshifter into the SHIFTER inputs. The polarity of the wires is not important. (Set to Switch Input #2 by default.)

Speed-

If your application has a speed sensor then you can tap into the signal side of the sensor and run a wire into this input. This will allow you to calculate gear position in the Control Center Software. Once gear position is setup you can alter your map based on gear position and setup gear dependent kill times when using a quickshifter.

Analog-

This input is for a 0-5v signal such as engine temp, boost, etc. Once this input is established you can alter your fuel curve based on this input in the control center software.

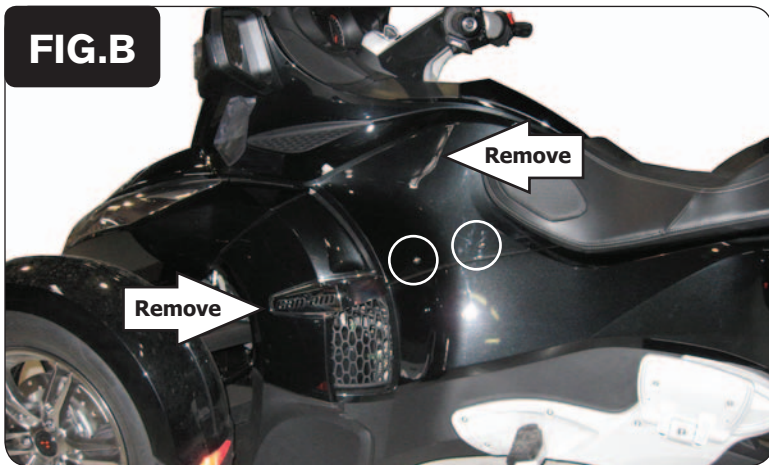
Crank-

Do **NOT** connect anything to this port unless instructed to do so by Dynojet. It is used to transfer crank trigger data from one module to another.



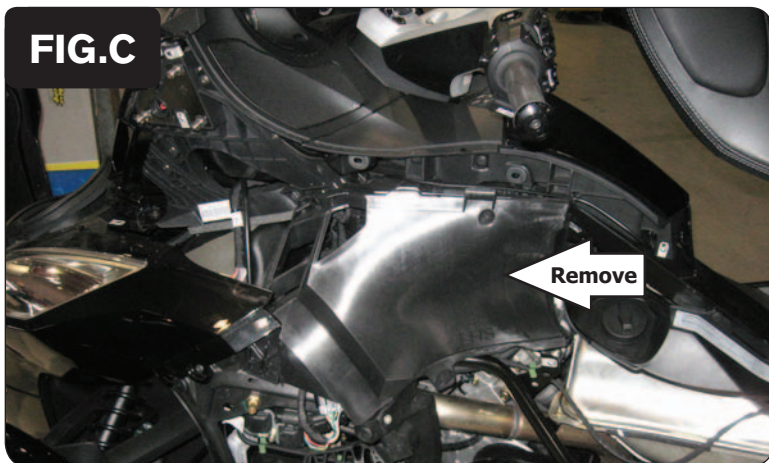
- 1 Open the seat and the front storage compartments.
- 2 Remove the two covers under the front storage lid (Fig. A).

Remove the push pins.



- 3 Remove the lower cover in Figure B by pulling outwards.
- 4 Remove the mirror by pulling outwards and up.
- 5 Remove the upper side cover.

The 2 silver bolts circled in Figure B do NOT need to be removed. Pull outwards in this area.



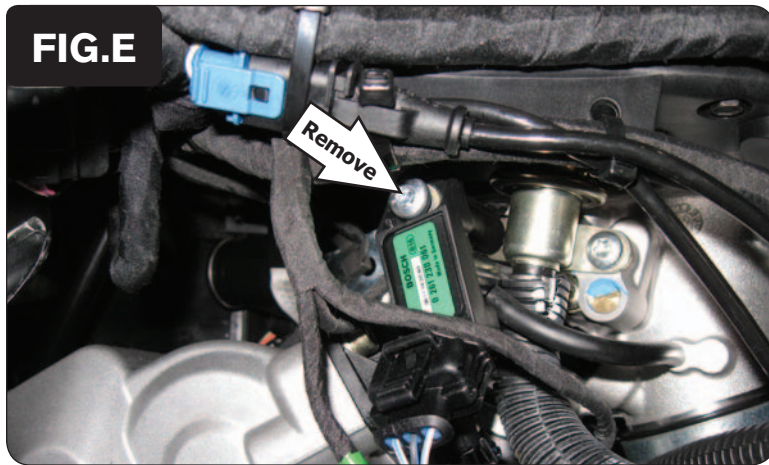
- 6 Remove the inner side cover (Fig. C).

Figure C is shown with the lower side panel removed. This panel does NOT need to be removed to perform steps 5 & 6.

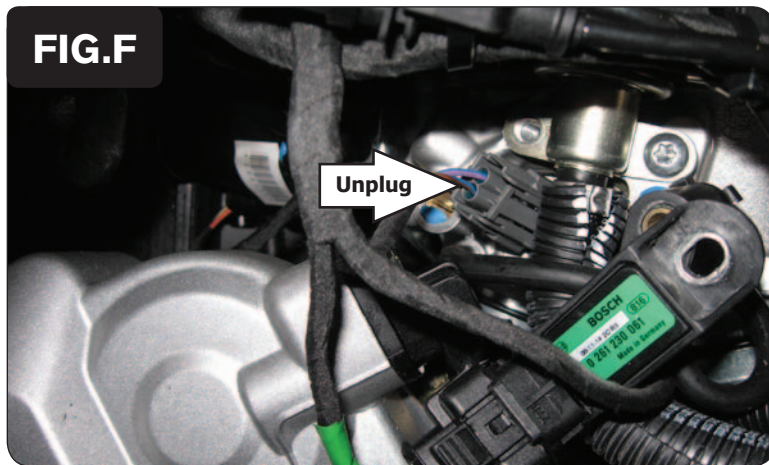
- 7 Repeat steps 3 thru 6 for the right hand side.



- 8 Using the supplied Velcro, secure the PCV unit in place under the seat.
- 9 Route the PCV harness down the left side of the vehicle and go towards the throttle bodies.
- 10 Also use the supplied Velcro to secure the O2 Optimizer unit in place under the seat on the right hand side (Fig. D).
- 11 Route its harness down the right side of the vehicle and go towards the air box.
Make sure to keep the harnesses away from the seat latch.



- 12 Remove the mounting bolt for the stock MAP sensor on the left side of the throttle bodies.
This allows access to the rear fuel injector.



- 13 Unplug the stock wiring harness from the rear fuel injector (Fig. F).



FIG.G

- 14 Plug the pair of PCV leads with YELLOW colored wires in-line of the stock wiring harness and the rear fuel injector (Fig. G).
- 15 Reinstall the MAP sensor to throttle body.

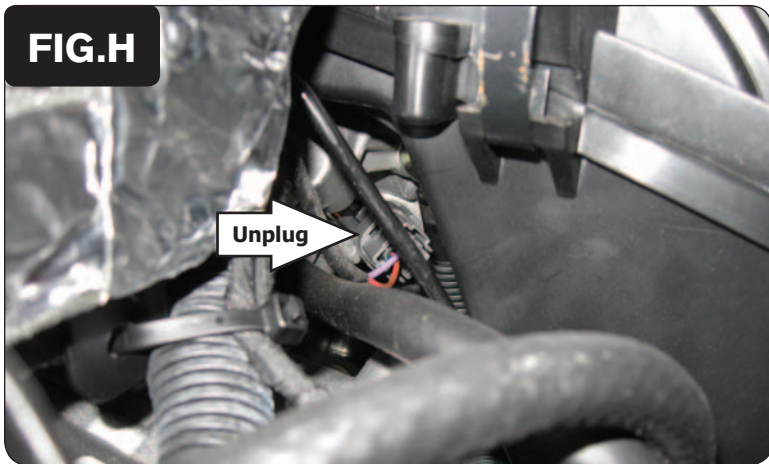


FIG.H

- 16 Unplug the stock wiring harness from the front fuel injector on the right hand side (Fig. H).

This connection is located to the right rear of the air box.

- 17 Plug the pair of PCV leads with ORANGE colored wires in-line of the stock wiring harness and front fuel injector.

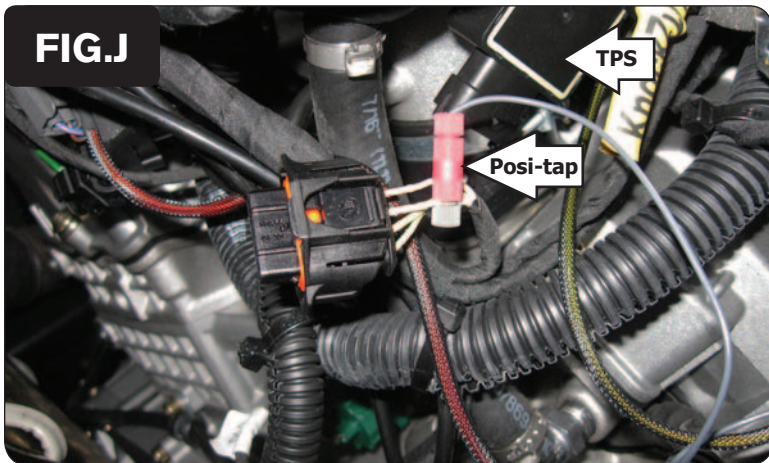
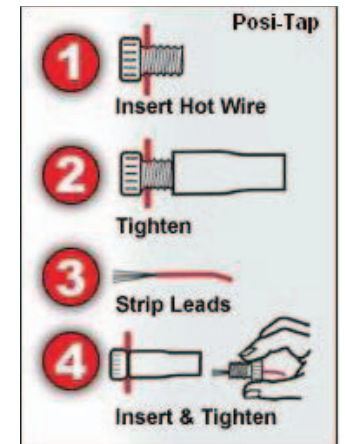


FIG.J

- 18 Locate the Throttle Position Sensor on the left side of the throttle bodies.
- 19 Use the supplied Posi-tap to attach the GREY wire of the PCV to the stock TAN/WHITE wire of the TPS wiring harness.

Figure J is shown with the TPS harness disconnected from the sensor. Make sure to reconnect the harness to the sensor after attaching the GREY wire to it.



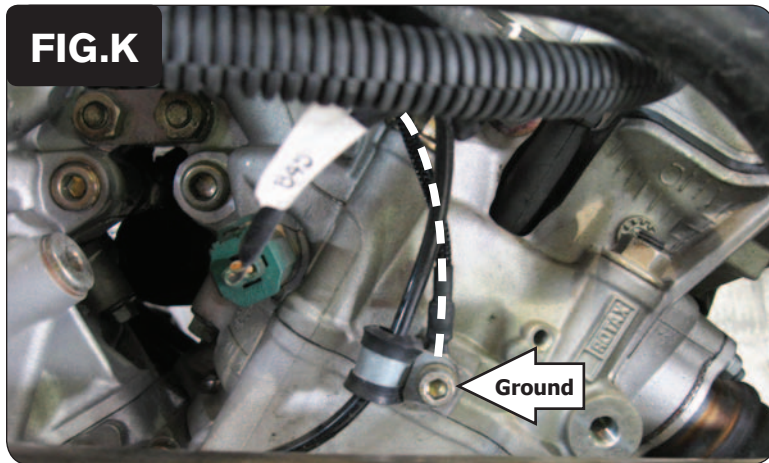


FIG.K

- 20 Attach the ground wire of the PCV with the small ring lug to the rear cylinder head on the left side (Fig. K).

Remove the stock bolt and insert bolt thru the eyelet of the PCV ground wire and reinstall bolt into head.

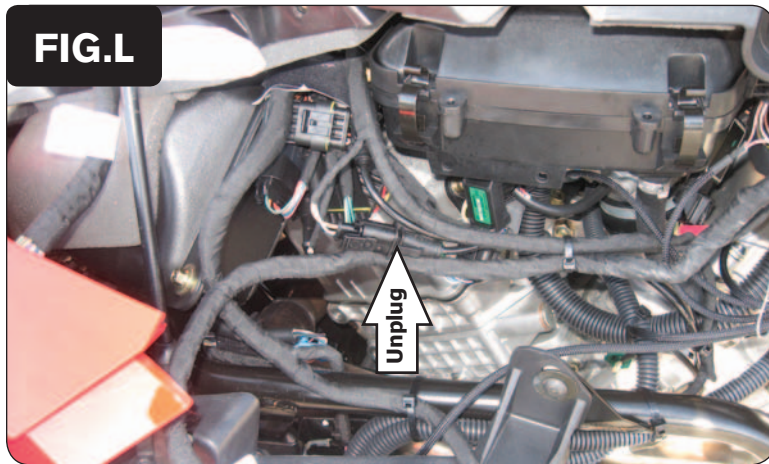


FIG.L

- 21 Locate the stock Crank Position Sensor connectors and unplug them (Fig. L).

This is a BLACK 2-pin connector pair on the left side of the engine.

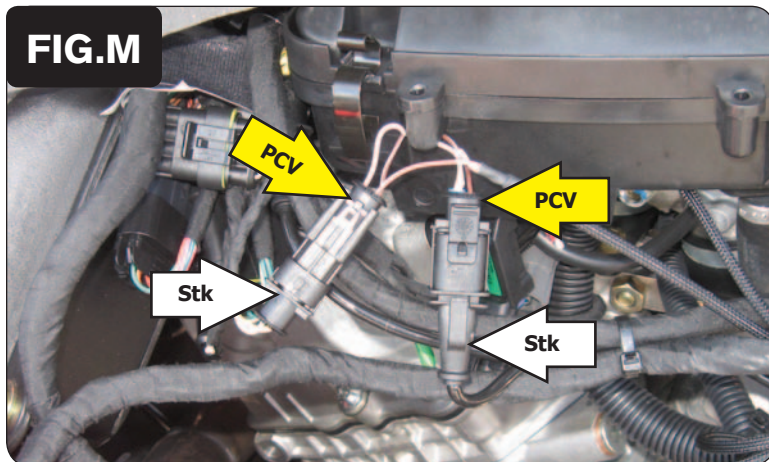
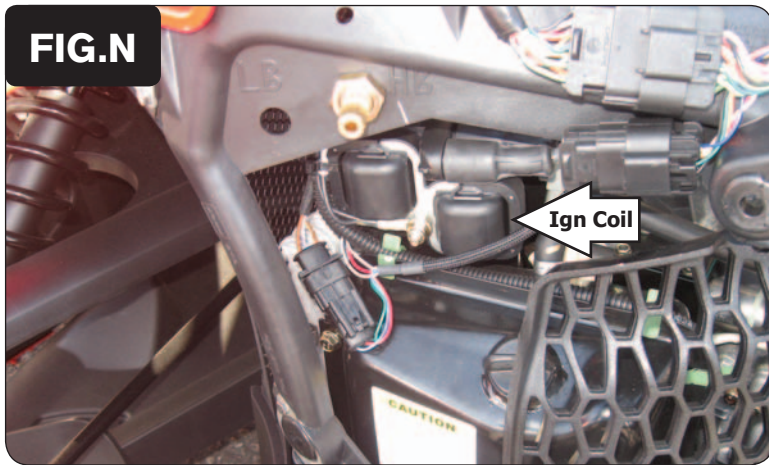


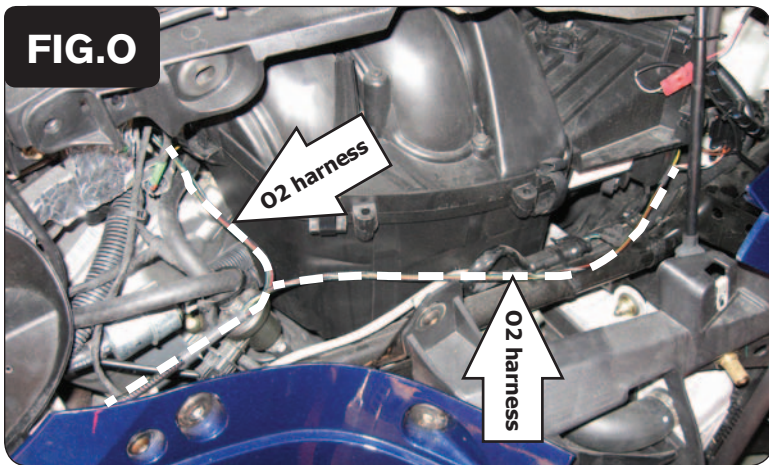
FIG.M

- 22 Plug the mating connectors from the PCV in-line of the stock Crank Position Sensor connectors (Fig. M).



- 23 Unplug the stock wiring harness from the Ignition Coil and plug the pair of PCV connectors with GREEN and BLUE colored wires in-line of the Ignition Coil and stock wiring harness (Fig. N).

This connection is located on the left side near the oil tank. The connector is on the front of the coil, squeeze the tab and pull forward to release.



- 24 Route the O2 Optimizer harness as shown in Figure O.

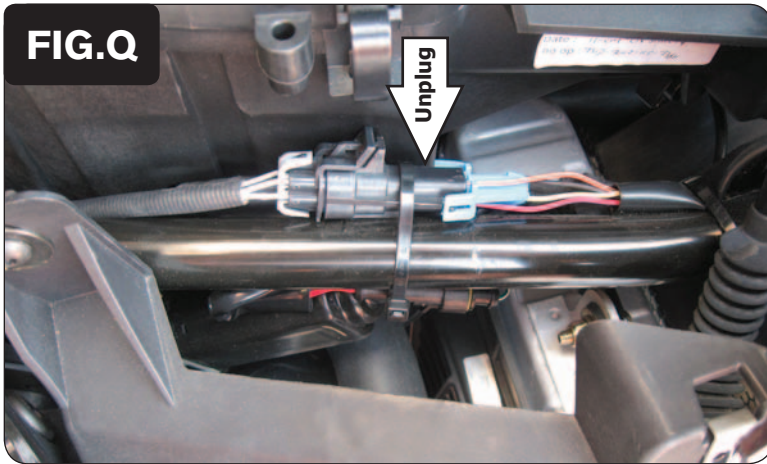
The connectors labeled front route to the left side of the air box.



- 25 Unplug the stock wiring harness from the front O2 sensor (Fig. P).

This connection is located on the left hand frame rail by the front cylinder

- 26 Plug the 4-pin connectors from the O2 Optimizer labeled FRONT in-line of the front O2 sensor and stock wiring harness.



27 Unplug the stock wiring harness from the rear O2 sensor (Fig. Q).

This connection is located on the right side of the vehicle between the air box and the frame rail.

28 Plug the pair of 4-pin connectors from the O2 Optimizer labeled REAR in-line of the rear O2 sensor and stock wiring harness.

29 Reinstall all of the bodywork.

	0	2	5	10	15	20	40	60	80	100
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	9	11	11
1500	0	8	8	8	8	8	8	12	11	11
1750	0	8	8	8	8	8	8	2	5	11
2000	0	8	8	8	8	8	8	3	3	12
2250	0	8	8	8	8	8	8	1	2	5
2500	0	8	8	8	8	8	8	1	3	3
2750	0	8	8	8	8	8	8	0	1	4
3000	0	8	8	8	8	8	8	2	2	-7
3250	0	8	8	8	8	8	8	1	1	-4
3500	0	8	8	8	8	8	8	-3	0	-10
3750	0	8	8	8	8	8	8	0	-1	-13
4000	0	8	8	8	8	8	8	0	-1	-14
4250	0	8	8	8	8	8	8	0	-4	-13
4500	0	8	8	8	8	8	8	0	-3	-14
4750	0	8	8	8	8	8	8	1	-3	-10
5000	0	8	8	8	8	8	8	-2	-4	-10
5250	0	8	8	8	8	8	8	-4	-2	-6
5500	0	8	8	8	8	8	8	-6	-1	-8
5750	0	8	8	8	8	8	8	-4	-1	-4
6000	0	8	8	8	8	8	8	-6	-1	-5
6250	0	8	8	8	8	8	8	-6	-1	-5
6500	0	8	8	8	8	8	8	-6	-1	-2
6750	0	8	8	8	8	8	0	-7	-1	-1
7000	0	8	8	8	8	8	0	-3	-1	0
7250	0	8	8	8	8	8	0	-3	0	0
7500	0	8	8	8	8	8	-4	-1		
7750	0	0	0	0	0	0	-4	0		
8000	0	0	0	0	0	11	-4	0		

The O2 Optimizer for this model controls the stock closed loop area. This area is represented by the highlighted cells shown in Figure R. The O2 Optimizer is designed to achieve a target AFR of 13.6:1. To use this O2 Optimizer you must retain your stock O2 sensors (even if using Auto-tune).

It is not recommended to alter the values in this highlighted area of your fuel table/tables unless instructed to do so by a Dynojet technician. Usually a blanket fuel change value of 8-10 across the entire closed loop range works best.

If using the Auto-tune system do NOT input values in this range of your Target AFR table/tables.