

Electronic Jet Kit™ Instructions



Thank you for choosing the Techlusion Electronic Jet Kit for your Yamaha Raptor 700 or YFZ 450. This technology interfaces with your fuel injected ATV. The result is injection with carb tuning logic. Giving you the equivalent of enriching the pilot jet and mixture screw, (pot under the green light) raising the needle, (pot under the yellow light) and then install a larger main jet, (pot under the red light).

Due to the wide variety of applications we try to be very generic with our instructions, so if you need further assistance with an install call technical support at 877-764-3337 or see our web site at dobeckperformance.com.

This product is a perfect fit for stock ATV's. It is also, capable of handling the fuel needs of pipes, air intakes, and a variety of head porting. If you find that your modification requires you to max out our pot adjustment, contact us and we can get you a custom chip.

This is an Electronic Jet Kit. Like jet kits in the past the more you modify the more responsibility you take in getting your fuel curve right. Going to dobeckperformance.com will better help you in high horsepower tuning.

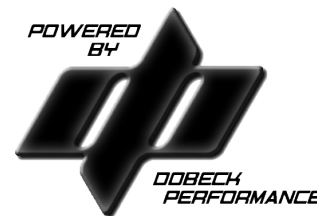
TOOLS REQUIRED

- 4mm allen
- 10mm wrench
- #2 phillips

Some vehicles modifications with Techlusion Inc. products must not be used on public roads and in some cases may be restricted to close course competition. Those products not identified as US EPA legal are intended for off-road or marine applications only. Not intended for use ON emission controlled vehicles.

Raptor Installation Instructions

1. Remove the seat.
2. Remove the gas cap and gas tank cover. (Figure 1) **NOTE: replace the gas cap as soon as the gas tank cover is removed.**
3. Remove the radiator cover bolts. (Figure 2).
4. Remove the front plastic bodywork bolts. (Figure 3,4) **NOTE: two bolts, one on each side, are under the front fender.**
5. Unplug the connector.
6. Lift off the front plastic bodywork.
7. Remove the 4 fuel tank mounting bolts (the front 2 have a short spacer).
8. Lift the tank off to the side (*you do not need to remove it*) remove the stock FI wire connector at the fuel injector.
9. Route the ground wire under the aluminum gas tank frame mount (*the aluminum mount just above the battery (-) negative terminal on the left side of the machine*)
10. Locate the fuel injector (figure 6).
11. Snap the female connector into the fuel injector.
12. Snap in the original connector you removed from the fuel injector into the short pigtail male connector (figure 7).
13. Remove the (-) battery terminal bolt and place ground pigtail above the stock(-) terminal and re install the (-) terminal bolt (figure 8).
14. For tuning purposes you may want to keep the TFI box where you can reach it but once you get things dialed in route the Dobeck wire harness under the battery mount and the two airbox mounting tabs then secure the harness to the frame with ziptys. The TFI box will easily fit in the rear toolbox area with the supplied Velcro pad (figure 9).
15. Start the ATV. The green LED should now be on steady and the yellow will flash rapidly for about 15 seconds, and then go out. If the green or red LEDs continue flashing after startup, an injector wiring error is indicated. Re-check the wire's from the TFI and make sure they are connected to the proper wire of your ATV's stock harness. **MAKE SURE** you have the correct wires selected in the stock harness. **DO NOT PROCEED UNLESS YOU HAVE A STEADY GREEN LED.**



Tuning

We suggest that you set your pots to the setting that best matches your bikes modification. Further adjustments can be made by first having your ATV fully warmed up. Then with a screwdriver in hand, locate the green light and the pot right below it. Raise the RPM up to a high idle or about 1800-RPM if you have a Tach. Once there, slowly turn the green pot clockwise from the 1:00 position (or off) until you achieve the highest RPM and smoothest running sound (just like you would if you had a mixture screw on a carburetor). You should find that the best setting is between 1:30 and 3:30.

Next locate the yellow light and the pot below it. This pot adjustment acts as an accelerator pump adjustment. Anytime you see the light on, it means that this pot is adding fuel. You will notice that you can take the RPM slowly up to 3000-4000 in neutral and see no yellow light. But whack the throttle wide open quickly and you see the yellow light come on. Try to add as much as you can until the bike says it is too much then back off two clock positions. This yellow pot adds most of its fuel below 4000 RPM and full throttle acceleration.

The red light pot is for your main jet. It adds about 3 jet sizes per clock position. For example: One clock position is the same as 170 to a 185 main jet. All we can say about setting up this pot is use the base setting that comes closest to your bikes modifications. Then use the same method you used, setting up your carbureted bikes.

The RPM switch controls when the red light comes on. The more you turn it from the one 'o clock position the higher the RPM before the red turns on. In testing we have found that 9:00 o'clock is a very good starting point for the 4th pot.

Troubleshooting

Problems

First it is important that you understand that all modern day fuel injected ATV's have a big advantage over carbureted ATV's. Fuel injected ATV's all have the same exact fuel curve and is corrected everyday by the on board weather station. Which means your ATV fuel map is either ideal or it needs a little. Just like jet kits did for you for years. If you find that anything you do with the pots make it worse, stop and check these possibilities:

1. Engine not fully warmed up.
2. A vacuum leak on the intake.
3. High lift cams affecting map at light loads and low RPMS.
4. The loss of TPS and ECU sync.

FULL THROTTLE

Simply add or subtract fuel with the red light pot to determine if the problem is better or worse. This lets the engine dictate additional adjustments or call tech support at 877-764-3337.

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Figure 1

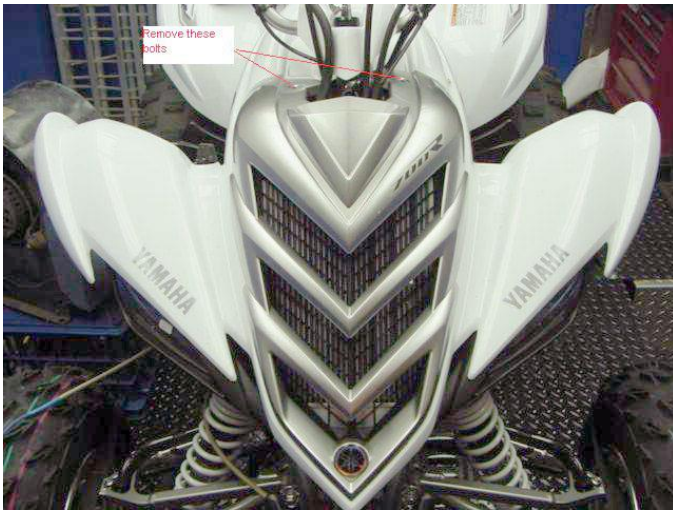


Figure 2

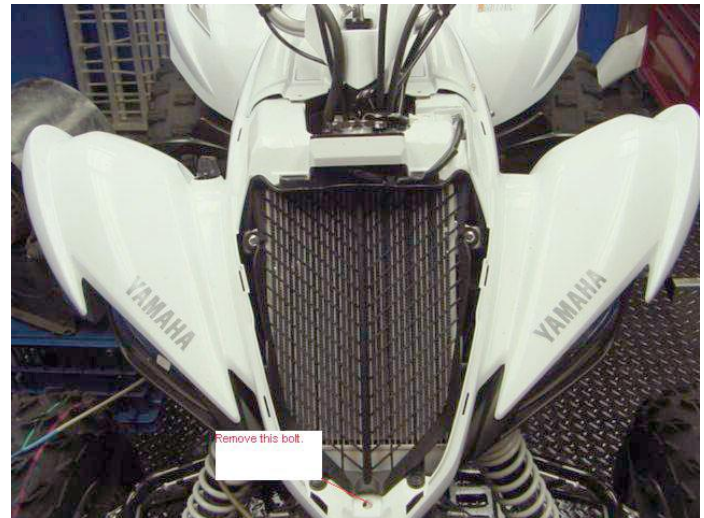


Figure 3

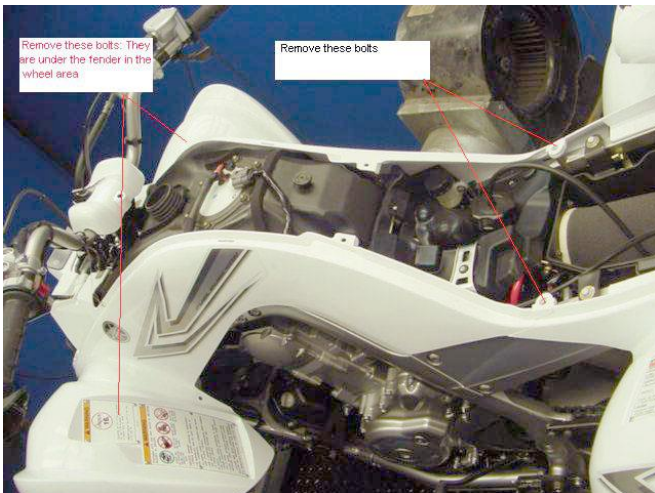


Figure 4



Figure 5

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Figure 6



Figure 7



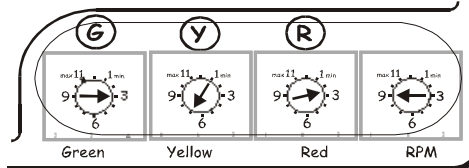
Figure 8



Figure 9

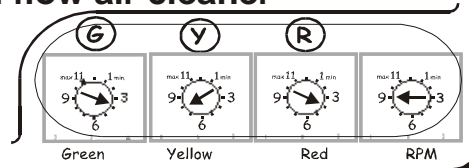
To view larger images please go to www.dobeckperformance.com

All stock



Full Race exhaust/ High flow air cleaner

Air box lid off



2-year Unlimited Mileage Warranty

Techlusion warrants that this product carries a warranty for 2-years from date of purchase against original defects in materials and workmanship. Should this product fail to perform for either of the above reasons, Techlusion will repair or replace it with an equivalent product at no charge, except for postage, to the original retail purchaser.

*****IMPORTANT*****

To obtain the benefits of this warranty, the retail purchaser must first call 1-877-764-3337 to obtain a Return Authorization Number, then send the product with proof of purchase and postage prepaid to:

**Dobeck Performance
157 Progressive Dr.
Belgrade, MT 59714**