

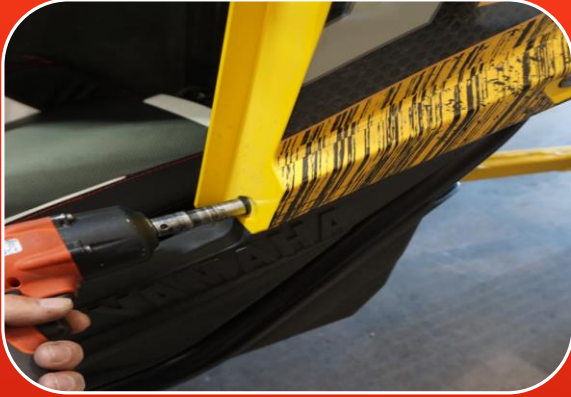


WELLER RACING TURBO KIT

Yamaha YXZ1000R



Step 1. Remove Rear Fenders.



Remove the rear fender lower front bolts using a 10mm socket



Remove the rear fender middle front bolts using a 10mm socket



Remove the rear fender upper bolts using a 5mm allen



Remove the rear fender brackets using a 10mm socket.



Remove the rear fender upper fasteners using a flat blade screwdriver.



Remove the rear fender lower bolts using a 4mm allen socket.



Remove fender



Fenders removed

Step 2. Remove cage. ***Cage pictured is after market.



Remove the rear cage bolts using a 14mm socket, 14mm wrench



Remove the b-pillar cage bolts using a 14mm socket, 6mm allen



Remove the front cage bolts using a 14mm socket, 14mm wrench

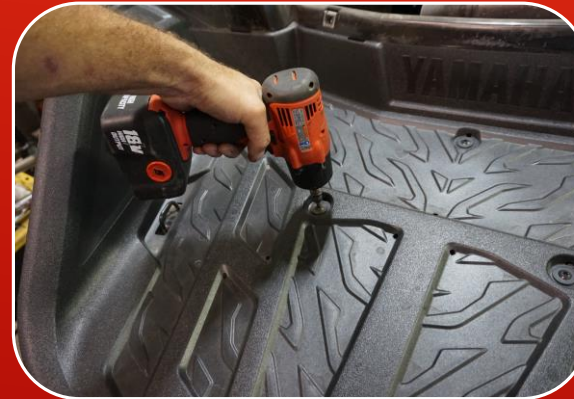
Step 3. Remove Bed.



Remove the center battery cover. Pull up from the back.



Remove the bed front fasteners using a flat blade screwdriver.



Remove the bed screws using a 27mm torx socket



Remove the air filter / oil tank inspection cover. 1/4 turn fastener.



Remove the bed front inner bolts using a 10mm socket



Remove the lower oil tank shroud using a 10mm socket



Remove the oil tank shroud



Remove bed

Step 4: Remove Intake / Airbox



Air box assembly



Remove the rear airbox mount using a 10mm socket



Remove the front airbox mounting bolt using a 10mm socket and long extension. Don't drop it!



Loosen the 3 throttle body boots using a 4mm allen socket



Unplug the air injection valve connector.



Remove the rear air injection plate from engine using a 5mm socket.



Remove the front air injection plate from engine using a 5mm socket.



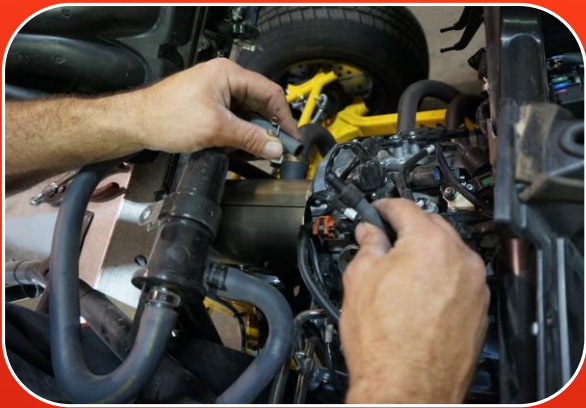
Remove the air injection actuator from the mount. Slide it out of the 2 prongs. Zip tie up connector (not used anymore.)



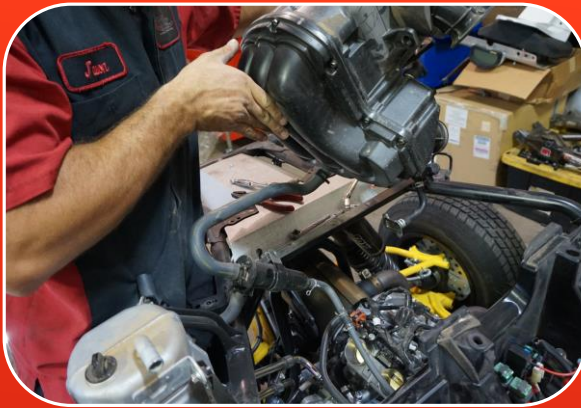
Remove 1/2" Idle control hose off of the throttle bodies located above the thermostat housing (just pull it off if you can't get it loose).



Remove the intake air temp sensor located in the airbox. Remove sensor for later step.

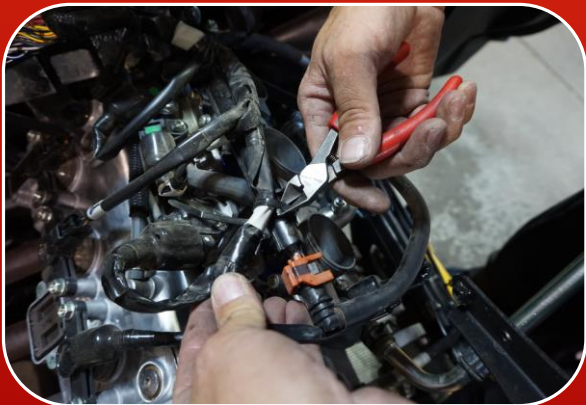


Remove hose to valve cover breather.

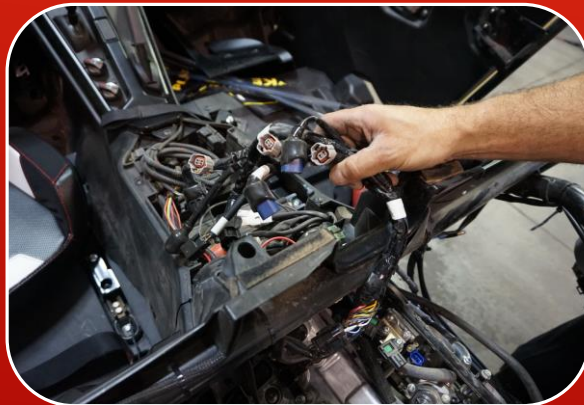


Remove airbox.

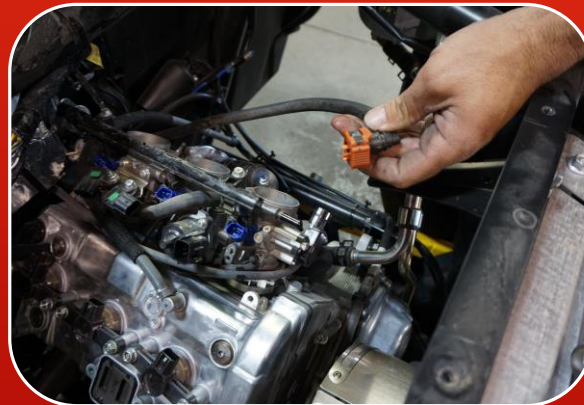
Step 5. Remove Throttle Bodies



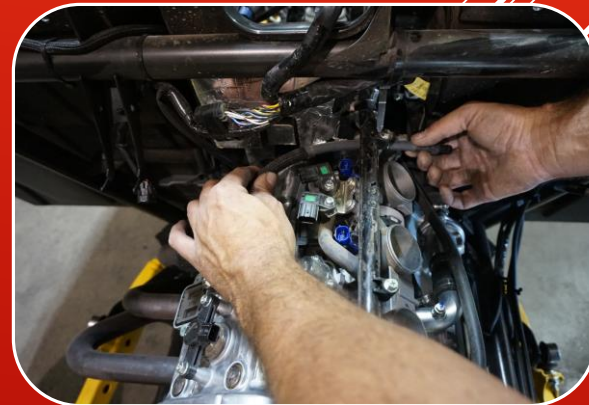
Cut the 2 zip ties off of the harness holding it to the fuel rail.



Remove all connectors off of the throttle bodies & set aside (injectors, TPS, 2x pressure sensors, coils, IAC motor).



Remove fuel rail fitting (slide cap out and push in on both sides, then pull off).



Move valve cover breather line out of the way.



Loosen the 3 top boot clamps holding throttle bodies on. Use a 4mm allen socket



Lift up on throttle bodies, separating them from the boots.



Cut the zip tie in front of header that is holding the throttle cable tight to the harness.



Position the throttle bodies so that you can access the throttle cable cover. Remove the cover w/ 3mm allen socket.



Hold butterfly open with your finger and turn brass cable end counter clockwise, then pull out with pliers.

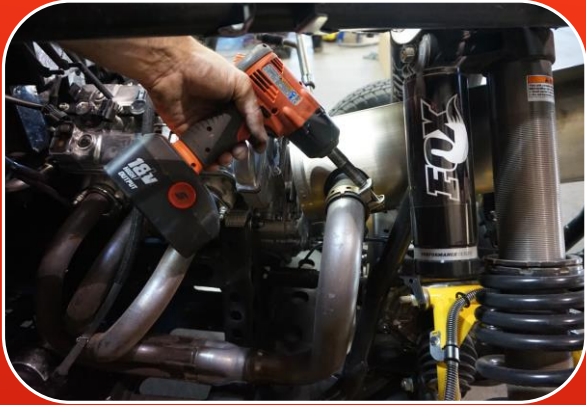


Remove brass cable end. Don't lose it! Un-screw cable from housing using 8mm wrench.



Remove throttle bodies and set on bench.

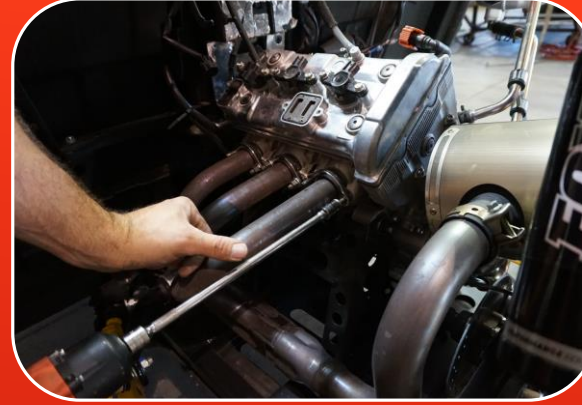
Step 6: Remove Exhaust



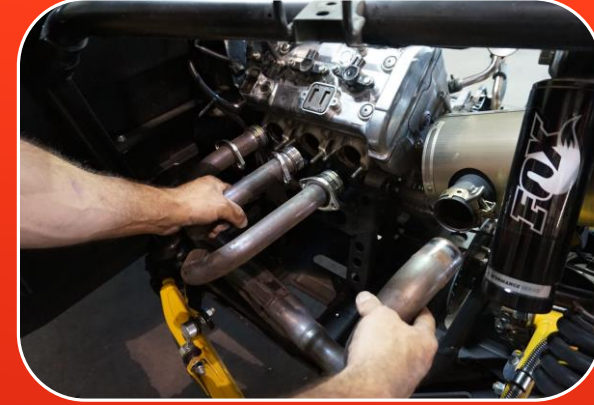
Loosen muffler to header clamp. Use a 10mm socket.



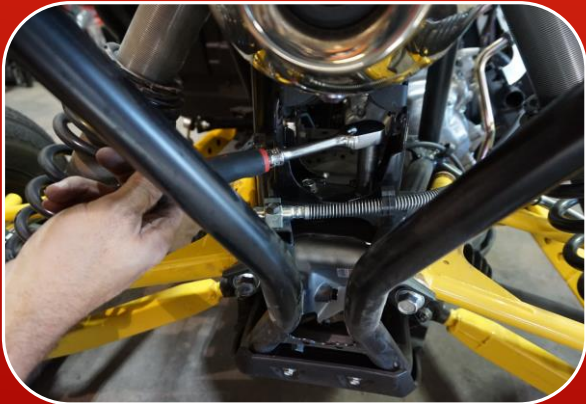
Remove the 4 bolts holding the muffler to the frame. Use a 14mm socket.



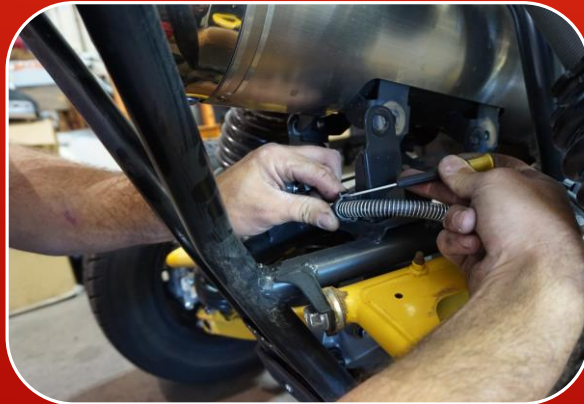
Remove the 6 nuts holding the header to the head. Use a 12mm socket (a long extension works good, too).



Remove the header.



Remove the 2 bolts holding lower muffler bracket in. Use a 14mm socket.



Remove rear brake line from clamp using small screwdriver. Then remove bracket.



Turn muffler upside down and remove from the rear. Be patient, as this can take some moving around to get it out.



As you are finishing pulling it out, rotate the muffler to clear the frame.

Step 7: Install new plenum on throttle bodies.



Remove the 2 bolts and spacers holding the fuel rail on. Use an 8mm socket.



Separate fuel rail with injectors from the throttle bodies. Make sure the seals stay on the injectors.



Install 3 o-rings in the new plenum. Use some type of o-ring lube such as grease, etc...



Wipe the surface and install the new plenum on throttle bodies. Be careful not to pinch or unseat the o-rings.



Push down on the plenum evenly to fully seat to the throttle bodies.



Re-use the 2 bolts removed and use 2 new spacers provided with the kit.



Re-install fuel rail, new spacers, and re-use bolts. Use Loctite and torque to 5 ft/lbs.



Flip over and install "L" bracket. Remove the factory long bolt and install the supplied long bolt so that the bolts don't hit each other.

Step 8: Install header manifold.



Replace both outer cylinder inner studs with shorter ones provided. Short side goes in the head.



Make sure that the 3 original gaskets stay in the head. These will get re-used.



Barely install manifold and start the 2 short stud nuts first.



Finish installing manifold and tighten all 6 bolts.

Step 9: Install turbo.



Install 2-hole drain fitting in bottom of turbo. Use gasket and 2 bolts supplied. Tighten.



Slightly loosen 6 bolts so turbo housing can spin with slight pressure.



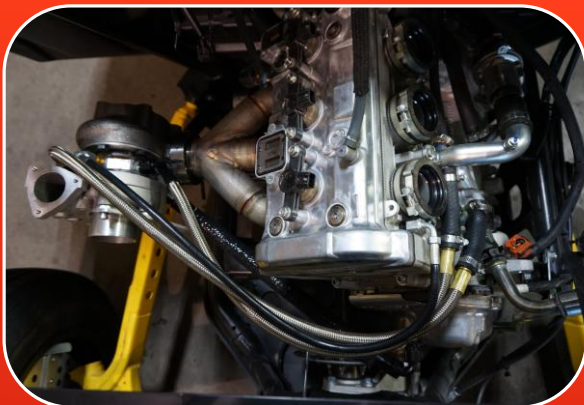
Install all 4 fittings in the turbo (using thread tape) on the 2 coolant fittings and 1 lower drain fitting.



Install turbo using V-band clamp and the return line into engine. Next, tighten turbo housing bolts.



Install -4 AN fitting w/ new copper washer into head. Install turbo supply line.



Install the 2 coolant lines and turbo oil supply line as shown.

Step 10: Install throttle bodies.



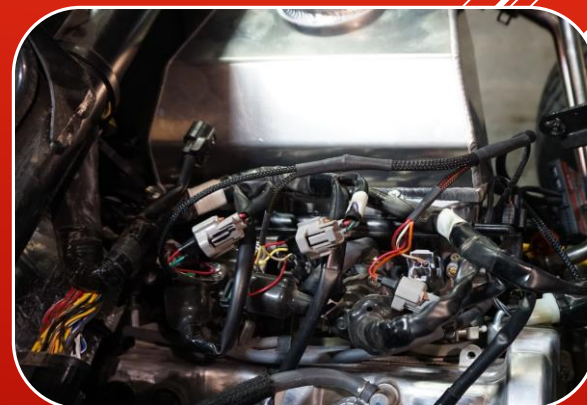
Re-install cable end, cable, and cover. Use 3mm allen socket to tighten allen bolts.



Install new pressure / temp sensor supplied with Power Commander. Use Loctite.



Install throttle bodies back into boots and tighten boots. Make sure they are seated all the way.



Install all connectors and new Power Commander at this time.



Remove the intake air temp from the old airbox and ziptie it to the harness after plugging in.



Plug in the new pressure / air temp sensor installed in the plenum.

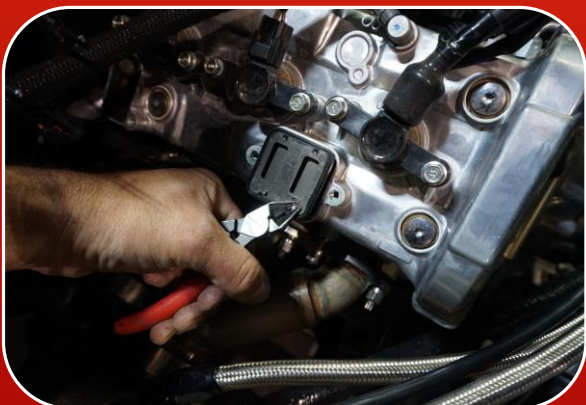


Ziptie all wiring to secure it so it can withstand everything you're going to put it through!



Install the fuel line. Slide orange safety clip over after install.

Step 11: Install air injection block off plates.



Remove both front and rear reed valves.



Shave off the 3 high points so cover sits flush (we used a grinding wheel to do this).



Loctite the 4 bolts and install the covers.



Torque to 7 ft/lbs using a 5mm allen socket.

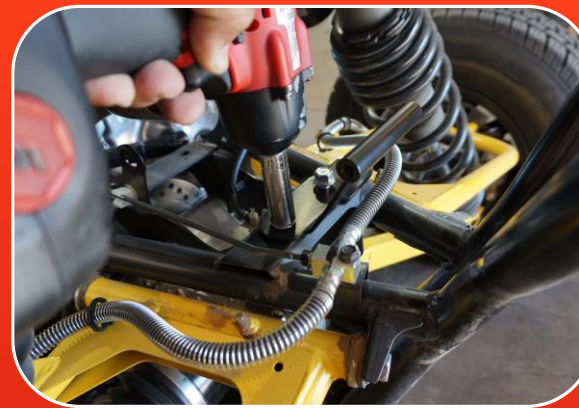
Step :12 Install Exhaust



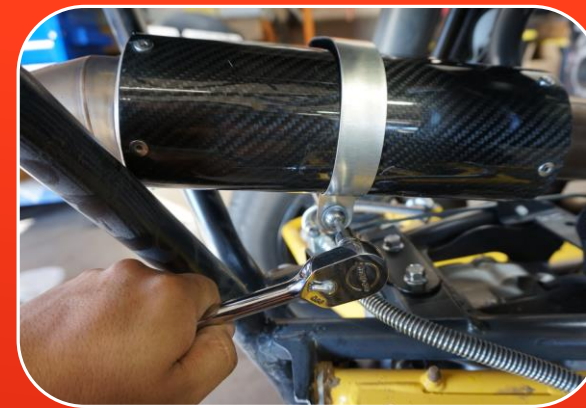
Install stainless mid pipe to turbo. Use a high temp silicone and the allen bolts supplied.



Allen bolts and lock washers pictured.



Install supplied bracket with factory bolts removed.



Install mufflers and brackets as shown. Use rubber insulators between the strap and the mufflers.

Step :13 Install Intercooler



Loosely install cross tube using 2 hose clamps.



Install o-ring in lower plenum.



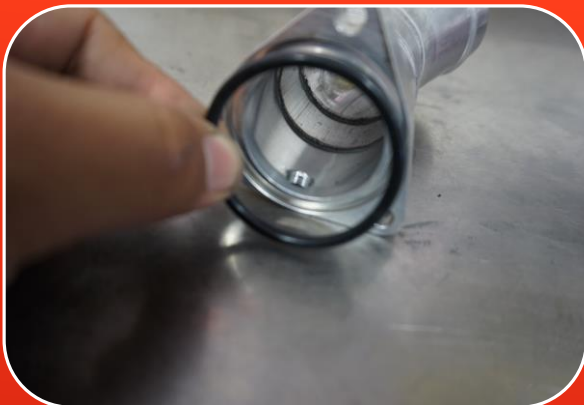
Install intercooler (make sure that sealing the o-ring is your #1 priority here).



Install V-band clamp supplied. Make sure collars are lined up perfectly. Snug, but allow intercooler to pivot. Tighten after all connected.



Install rubber mounts and bolts supplied. Loctite and tighten.



Install the O-ring into the turbo feed fitting.



Install coupler on fitting and line up with turbo (a rubber mallet can be used to clock the turbo housing for alignment).



Loctite and tighten bolts, then tighten hose clamps after aligned.



Install fitting and hose in the fitting just installed. Use thread sealer on the threads. Install as shown.



Connect hose to waste gate actuator as shown.



Run 2 wires to the fans as shown.



Mount Power Commander and Auto Tune as shown. Connect O2 sensor and run wires to fuse box ignition power.



Locate fuse box. Using supplied fuse tap, connect the fans and Auto Tune to key on power. Ground to battery.

Step 14: Install Breathers / Lines



Re-install valve cover vent line.



Install 1/2" supplied line to throttle body fitting for idle air control valve. Route up by oil tank breather.



Install breather filters as shown.

Step 15: Install Bed / Air Filter



Trim bed to fit around intercooler as shown (a cut off wheel works good for this).



Use a 4" holesaw to cut a hole for the air filter on the left side of the bed. Center for best results.



Install intake tube and air filter as shown. Tighten clamps.



Top view of air filter. You must leave the factory (big screw on) lid off for engine to breathe!

Congratulations you have just installed your turbo kit made by Weller Racing and Race Proven Motors!

If you setup your POD-300 display to display AFR and pressure, that works the best. The pressure will be your boost. 14 will be your non boost display, so 15 would be 1 psi, 16 = 2 psi, and so on. We expect you to call us when the kit is installed to walk you through a couple of checks before you scream it down the street. Example: make sure boost is set correctly to 6 psi (20 on display) / AFR is 12:1 or lower (richer) under boost. Don't hesitate to call or email us!!!

Our kits are constantly in testing mode to stay ahead of the game. Currently, this kit has been tested and proven at 6 PSI running 110 octane race gas. We are currently testing this kit on 91 octane pump gas and will have settings for that soon. We strongly recommend that you run race gas until we conclude our testing. Check back with us for details. We also program the factory ECU in-house, which allows us to remove the top speed limiter and any other function you may need.

Call for details on this or with any questions you have with our products.

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