Fizzle High Efficiency Intercooler Kit Installation Instructions

Note: The minimum exhaust modification required for the installation of this intercooler is the removal of the OEM black plastic resonator box. It can easily be replaced with an 8" long, 2.5" diameter straight pipe (a 90 degree elbow is also recommended for 2006 & newer models).

Removing OEM system and preparing engine compartment for installation:

1. Unclip engine coolant overflow tank and remove from mounting location. Set it out of the way, but make sure it does not tip over.

2. RXP MODELS: Remove engine compartment cowling by first removing the two forward-most M10 socket head cap bolts and rear-most M10 socket head cap bolt completely. Loosen the two remaining M10 socket head cap bolts on lower inside rear edge of engine compartment cowling.

3. RXT / GTX-SC LTD MODELS: Completely loosen the four M8 bolts holding engine compartment cross section in place. Remove both top and bottom halves of engine compartment cross-section support. The air intake duct attached to the bottom half will no longer be needed.

4. Remove OE rubber connecting hose joint between supercharger outlet and throttle body.

5. STEPS 5-8 SCIC MODELS ONLY: Disconnect the two waterlines connected to stock intercooler fittings at front of the intake manifold. Disconnect Line 1 at front of exhaust manifold and remove completely. Disconnect Line 2 at pump transom and remove completely. **NOTE**: Keep both lines for later use in the installation of the intercooler kit.

6. At the front of intake manifold remove the collar securing forward end of intercooler core to intake manifold housing. Keep the collar for securing the stock intercooler block-off plate.

7. Twist and pull stock intercooler core forward towards front of craft to remove. If the stock intercooler will not budge, proceed to loosen the 7 torx bolts that are holding the intake manifold to the engine block.

8. Install supplied block-off plug (with o-ring) into opening at front of intake manifold housing left when stock intercooler was removed. **NOTE**: Apply a thin layer of waterproof grease onto o-ring before installing block-off. Also, it is highly recommended to apply sensor safe silicone (gasket maker) to the mating surface of the block-off plate prior to

installation to ensure proper adhesion and to aid the prevention of a boost leak. Ensure that the plugs for the boost ports are sealed and secure if not in use. Secure the block off plate with the collar previously removed in step 6.

9. In the rear of craft on the left side of pump transom remove both of the upper and lower M10 x 45 bolts and washers securing pump support to hull. Test fit the arm of the two piece intercooler mounting bracket to ensure it mounts flush against pump transom.

Attaching hardware to intercooler and preparing intercooler for installation:

10. There are two small threaded holes on the bottom of each intercooler air tank. None of these holes will be used in this installation. The holes are not drilled all the way through the tanks so there is no need to plug the holes with anything.

11. Install the supplied 2.75”-2.5” straight silicone reducer onto the 2.75” intercooler inlet flange (supercharger/exhaust side of the craft). Secure the larger end of the reducer coupler to the intercooler inlet flange using one supplied 2.75” hose clamp.

12. Install the supplied 2.75”-2.5” bending reducer onto the 2.75” intercooler outlet flange (throttle body/intake side of the craft). Secure the reducer using one supplied 2.75” hose clamp, but do not fully tighten the clamp because the coupler may need to be rotated slightly or removed throughout the installation of the intercooler.

13. Install the 2 supplied large brass fittings into the ½” threaded holes located on the front of the intercooler. The 90 degree hose fitting needs to be installed first and should be pointing at an approximately 45 degree angle upwards towards the pump inlet. This fitting is for the inlet line and installs into the top-left threaded hole when looking at the front of the intercooler. The straight hose fitting installs into the lower right threaded hole and is used as the water outlet line. Use a wrench to tighten the fittings until snug. Do not over tighten as the aluminum can cause the brass threads to strip.

Assembling and installing intercooler with intercooler bracket

14. Secure the two supplied rubber straps to the mounting bracket plate using the supplied bolts, washers, and nuts. The nut-end of each bolt should be facing where the intercooler will sit and the head-end of each bolt should be facing the rear of the craft. Ensure that the hook on each rubber strap has the top opening of the ‘S’ shape facing downward once the straps are installed onto the bracket plate.

15. Using the waterline previously removed from water inlet fitting at pump transom to

stock intercooler; connect one end to water outlet fitting on intercooler. Route loose end towards exhaust side of engine, then forward and connect to hose barb fitting at front/bottom of the exhaust manifold. Secure using the original hose clamp. **NOTE**: For steps 17 & 20; take care not to kink hoses. It may be necessary to trim excess hose for proper fit.

16. The following instructions 17A and 17B are the two basic methods for installing the intercooler and bracket into their proper location. Choose the one that seems most appropriate for your space constraints and mechanical ability. It is recommended to seal the back face of the bracket support arm to the pump transom surface with silicone sealant (gasket maker) in order to avoid potential water leaks from the pump support bolts. Keep in mind that the **intercooler bracket plate and the intercooler** itself will **need to be** attached in a way that they are both **rotated slightly towards the supercharger**. This is essential in getting all of the piping to line up properly.

17A. Bolt the bracket plate and bracket arm together using the 3 supplied bolts and deep cylinder washers. Then, place the intercooler onto the bracket mounting plate. Strap the intercooler to the bracket plate by pulling the straps over the front of the intercooler and hooking each 'S' hook to its respective attachment hole on the bottom side of the bracket mounting plate. The rubber straps work best when they are diagonally crossed over each other on top of the intercooler (see picture below). Once the intercooler is secured to the mounting plate with the straps, hook the bottom of the bracket arm leg around the engine coolant hose located near the pump transom. This will allow each of the holes on the bracket arm to line up with its respective matching hole on the pump transom. To hook the bracket arm around the large engine coolant hose you will have to turn the intercooler into a specific orientation. The intercooler will have to be placed so that it is standing vertically and sideways. In this position the back plate of the intercooler and mounting bracket will be sitting on the bottom of the hull. The 2.75" air inlet and outlet openings will be facing upwards. Once the curve in the bracket arm is hooked under the hose, rotate the intercooler and bring it back to horizontal. This may not be necessary on the more spacious GTX/RXT. Re-install the factory pump support bolts through the bracket arm once the bracket arm is mating with the hull at the pump transom surface. The bolts with washers will first go through the intercooler bracket arm, then into the pump support threads. Make sure to fully tighten these bolts.

17B. Place the intercooler onto the bracket mounting plate. Strap the intercooler to the bracket plate by pulling the straps over the front of the intercooler and hooking each 'S' hook to its respective attachment hole on the bottom side of the bracket mounting plate. The rubber straps work best when they are diagonally crossed over each other on top of the intercooler (see picture below). Take the bracket arm and put it in place against the pump transom (with recommended silicone sealant). Re-install the factory pump support bolts once the bracket arm is mating with the hull at the pump transom. The bolts with washers will first go through the intercooler bracket arm, then into the pump support

threads. Make sure to fully tighten these bolts. Finally, place the intercooler and bracket plate on top of the flat shelf of the bracket arm. Install the 3 supplied bolts and 3 long cylinder washers from the bottom to attach the bracket arm to the bracket plate.

18. Test fit the 2.5” 45 degree aluminum pipe between the supercharger and intercooler to identify which end of the pipe will attach to each coupler. Slide the 2.5” straight silicone coupler onto the 45 degree pipe so that the entire coupler is completely overlapping with the end of the pipe that will connect to the supercharger outlet. Insert the 45 degree pipe into the straight reducer coupler mentioned in step 11. Then, slide the 2.5” straight coupler with clamps onto the supercharger outlet. Secure the pipe and the remaining ends of each coupler with three of the supplied 2.5” clamps. The pipes can overlap with (go inside of) the intercooler inlet/outlet.

19. Slide the 2.5” 45 degree silicone elbow onto the supplied 2.5” aluminum straight pipe as far as it will go without forcing it. Insert the other end of the pipe into the 45 degree reducer coupler coming off of the intercooler. Position the pipe and 2.5” 45 degree coupler so the piping will line up with the throttle body inlet. Slide the 2.5” 45 degree coupler over the throttle body inlet. Rotate each 45 degree coupler again, if necessary, so that both angled couplers and the straight pipe are attached properly to each other and to their respective inlet or outlet. Add three of the supplied 2.5” clamps and then tighten the three clamps. Finish tightening the 2.75” clamp that secures the angled coupler to the intercooler outlet flange (refer to step 12). **NOTE**: It is recommended to seal the connections between the silicone hoses and the pipes with silicone in effort to prevent possible boost leaks.

20. Using the waterline previously removed from intercooler to exhaust manifold; connect end with distinct bend to the water inlet fitting on intercooler and secure the water line with a hose clamp. Route the loose end towards water inlet fitting at pump transom and secure using a hose clamp.

Completing installation and cleaning engine compartment

21. Replace engine compartment cowling in reverse order of Step 3

22. Replace engine coolant overflow tank. Again, be careful to not tip the overflow tank.

23. Installation is now complete. Thoroughly inspect the engine compartment for tools, rags, parts, etc. Run craft on a hose to ensure no leaks exist. Check service manual for flushing instructions. After engine cools check all hoses and clamps to make sure they are secure. **NOTE**: The couplers will expand after being heated. The clamps may need to be tightened a second time after running the machine. Make sure still to not over tighten the clamps.

Enjoy your new found power. Don't forget to ride safe and have fun!

Water Fittings:
90 degree fitting installs into upper left hole on the front face of the intercooler. Install this fitting first and position it at an angle similar to the one seen in the picture.
Straight fitting installs into remaining hole on the front face of the intercooler (lower right hole). Install this fitting second, after installing the 90 degree fitting.
Water "inlet" line from pump transom attaches to 90 degree fitting on upper left of front of the intercooler.
Water "outlet" going to exhaust manifold attaches to straight fitting on lower right of front of the intercooler.