



BoonDocker

P E R F O R M A N C E

***Product Description
Installation Instructions***



BoonDocker RMK Turbo



1. Remove side panels, hood, seat, fuel tank, and muffler. Save exhaust springs and rubber muffler mounts for turbo install.



2. Remove stock air box, remove fuel line bracket. Sand back surface flat for mounting.



3. Remove factory TBAP sensor from stock air box and zip tie to over structure.



4. Un-bolt and un-strap the stock oil tank. Leave oil line hooked up.

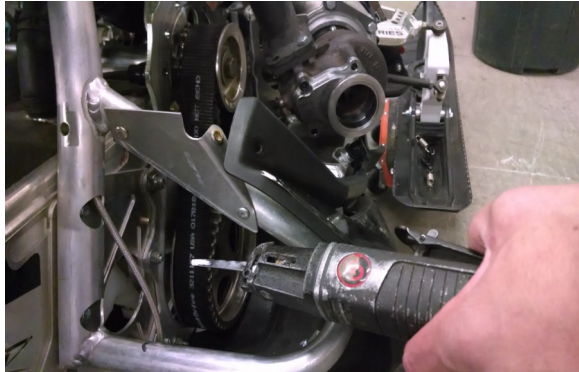


5. With ECU in place hold the fuel filter on the back side of fuel line bracket to ensure proper fitment, drill a 1/4" hole in the tab for bracket mounting



6. Snap the fuel filter and fuel line into the fuel line bracket and secure to clutch cover using the 1/4" bolt and lock nut. Reinstall the oil tank.

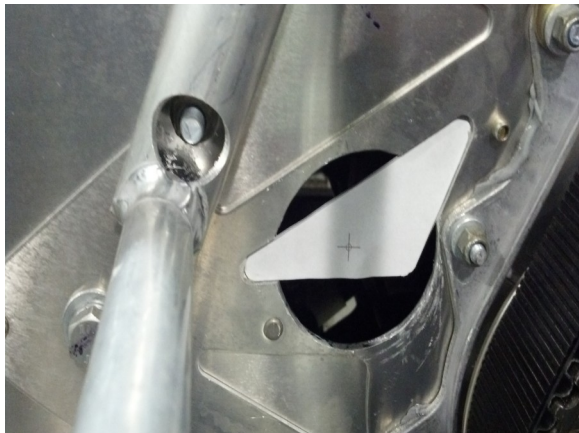
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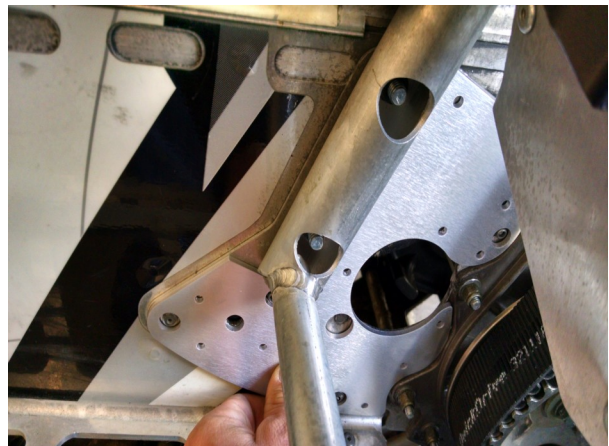
7. Use a punch to remove the steel center from necessary rivets. Use a straight edge to mark the cut line to remove lower portion of kick plate. Leave the upper portion for side panel mounting.



8. Remove the stock exhaust deflector and seal. Install exhaust block off plate using supplied rivets from the top using plate as rivet backer.



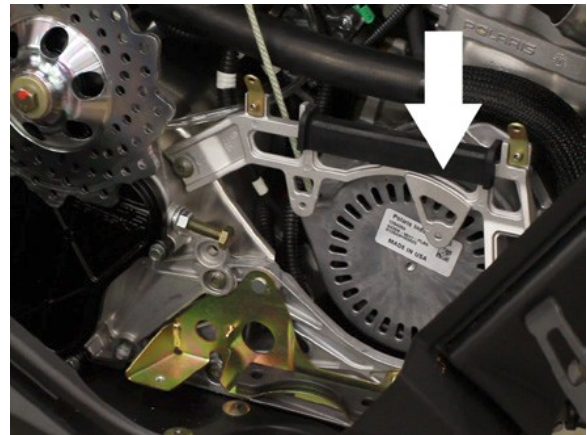
9. Use the attached template to locate muffler hole location, Center punch and then drill 2 1/2" hole for exhaust outlet.



10. Remove front suspension bolts and install tunnel support plates, Re-install suspension bolts and finish securing using supplied rivets..



11. Install spring tab and heat deflector on belt drive models using factory bolts as shown.



12. Using a pair of pliers break off chassis tab in the image and grind to match the stock contoured surface. (Not necessary to remove for Tial exhaust system)

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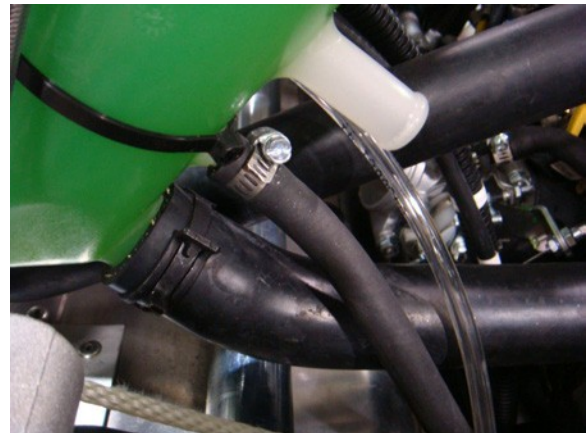


13.

14. Attach the rubber exhaust mounts to turbo Bracket as shown . **Note:** 2011-12' are different than 2013'.



15. Hang the turbo assembly in place using the stock muffler mounting locations, make sure turbo sits down on rubber mounts.



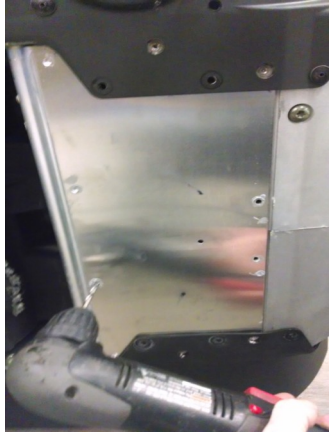
16. Lower coolant level in bottle, remove stock coolant line from coolant bottle to throttle bodies. Route the inside turbo coolant line to coolant bottle. Proper routing will avoid pull rope, and sharp edges



17. Route outside coolant line over to the throttle Bodies and secure using supplied hose clamps.

18.

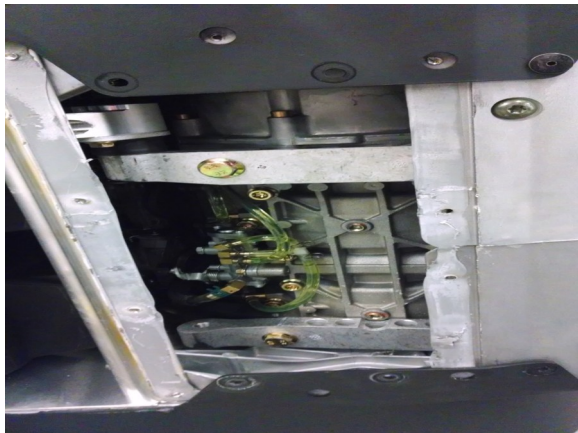
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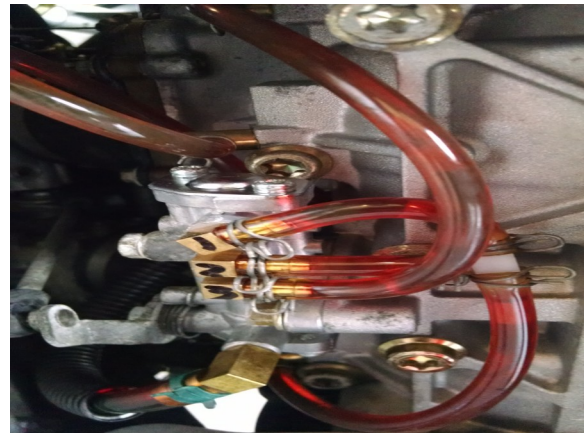
19. Tip sled onto left side (clutch towards floor) center punch rivets to remove stud to make drilling easier. Drill all rivets holding on access plate.



20. Using a torch or heat gun. Heat up the access panel to break the glue bond. Note it may require prying to break loose. (use caution to prevent a fire)



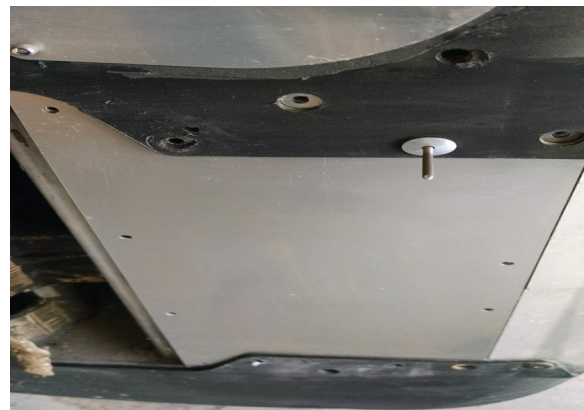
21. Remove access plate, clean excess glue from bulk head. And remove all rivet studs and shavings from bulk head. A magnet may be helpful.



22. Using a marker, Label oil ports as shown. 1- top 2- center and 3. Remove oil lines 1 and 2 from the pump and engine. Port 3 will remain unchanged. Save clamps for new line install.



23. Use the 36" supplied oil line and protective sleeve and route to the turbo, avoid sharp edges and heat, zip tie where necessary. Before attaching lines, fill oil lines with injection oil, attach turbo oil line to port labeled #1. Use 7 1/2" supplied line and route from port labeled #2 to PTO crank bearing. Use stock clamps to secure lines to oil fittings. **WARNING** lines **MUST** be plugged in proper ports. Prevent engine damage!



24. (If installing Water to Air cooler see supplement instruction at this time). Install supplied access plate, line up with pre-existing holes and attach using supplied hardware.

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25. Install foot rest kick plate. (Note: install kick plate “only install the 2 lower rivets on top running board at this time”) the last rivet will be installed later to adjust clearance



26. Remove the stock pipe from Y-pipe, remove the exhaust donut and run a bead of silicone around inside and reinstall on Y-pipe, Note: make sure to align notches on Y-pipe to donut



27. Run a bead of silicone on the inside of the flange on the exhaust pipe.



28. Install springs from pipe to Y-pipe 2-springs on side spring tabs and 3-springs on top spring tab.



29. Run a bead of silicone on inside of the small exhaust donut and install on pipe



30. Run a bead of silicone on inside of the bell of turbo inlet pipe. Bolt inlet to turbo using 4 bolts and 4 hole gasket . If installing stainless Tial see next step.

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31. Install turbo inlet and v-band clamp do not tighten all the way, make sure it is properly aligned and seated and snug v-band clamp.



32. Install stainless muffler into tunnel and attach to turbo using v-band clamp make sure to properly align and seat, snug v-band do not tighten all the way.



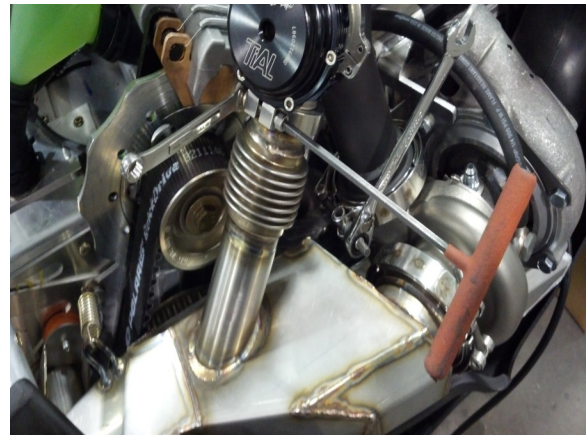
33. Install Tial external waste gate, rotate turbo inlet and muffler for proper alignment using supplied clamps snug waste gate into place do not tighten yet.



34. Spring turbo inlet into place using the 4 long gold exhaust springs.



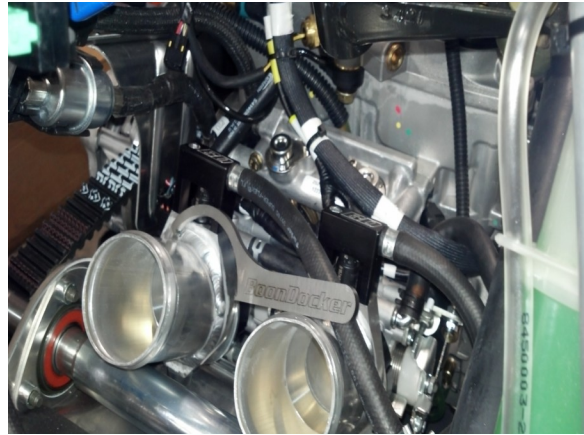
35. Spring muffler into place using short exhaust spring. (At this time finish riveting the kick plate in place, use inside rivet to adjust distance between muffler and kick plate)



36. Make sure there is no binding in exhaust connections and there are no gaps between V-band connections **NOTE: gaps will not close by tightening.** Tighten all V-band and waste gate clamps

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37.



38. Install machined throttle body adapters, make sure o-ring is in throttle body grooves tighten using supplied spanner wrench **NOTE: tighten until compression ring bottom ,do not over tighten**



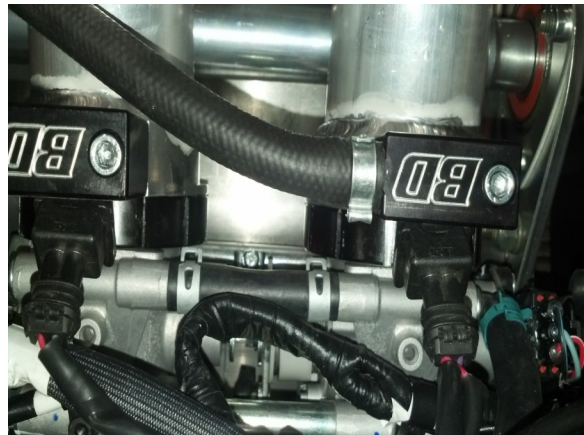
39. Route fuel line from auxiliary injectors over to fuel line bracket. Cut and splice into the fuel line behind the bracket, **NOTE: splice into the line that does NOT have in line filter.**



40. Rotate the DET sensor as shown torque to 11- 12 ft lbs. Route wiring and zip tie to throttle body coolant line.

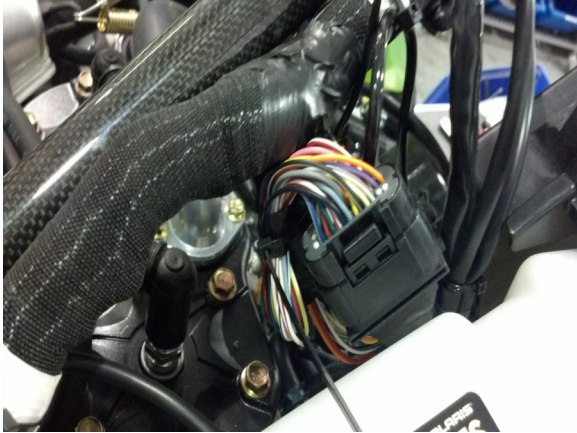


41. Unplug the lower multi-pin connector from the ECU, (located on backside of oil tank) Plug the BoonDocker wire harness in to ECU and stock connector into BoonDocker harness.



42. Route the Auxiliary injector connectors to throttle body adapters and plug into BoonDocker injectors on fuel rails. Secure with zip ties

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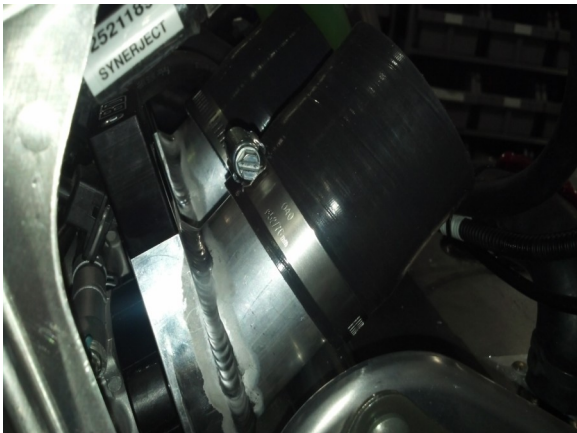


43. Zip tie factory ECU plug so there is proper clearance with out wire chaffing or rubbing.



44. Install Torque building silicone air box, make sure not to slide on to far for proper jackshaft clearance. Tighten hose clamps.

NOTE: if installing inner-cooler see next step.

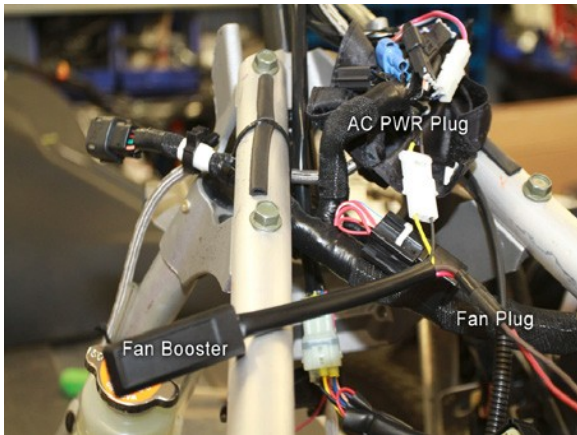


45. Install silicone hose onto throttle body adapters make sure to have proper jackshaft clearance

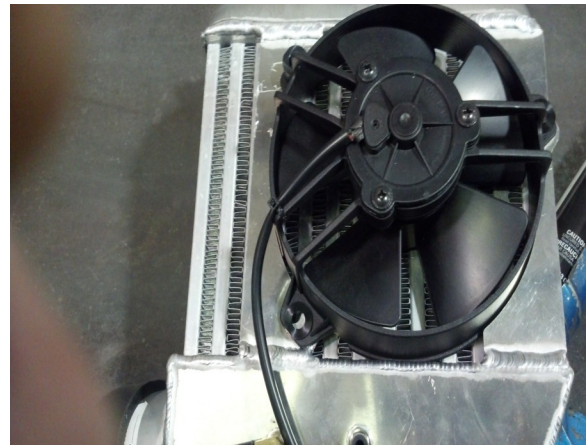


46. Install Torque building inner-cooler, (Tech tip, moving steering post may make install easier.) Adjust for clearance of head, electrical wiring, fuel filter, fan, and chassis before tightening

IF NOT installing inner-cooler go to step#49



47. Locate the A/C PWR plug, (A/C plug is located in Velcro pouch above the fan near steering post. Plug the fan booster into the factory A/C plug, and rubber connector into fan.



48. Install the fan onto the inner-cooler using the supplied 1/4" bolts and lock washers. Route the fan power to fan booster and secure w/ zip ties.

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49. Locate the temp sensor wiring (located in rear of inner-cooler or in silicone air box) route and plug into control box harness secure with zip ties.



51. Install charge tube, (Inner-cooler and Air Box) Adjust for maximum clearance and tighten clamps



52. Install electronic boost solenoid using Velcro and zip tie to secure to coolant hose. Route 3/16" line from brass fitting to top of solenoid .



53. Locate solenoid power connector from the control box, follow stock wire harness over steering linkage over to boost solenoid and plug in secure with zip ties.



54. Route 3/16" line from 90 fitting on boost solenoid to the boost actuator on turbo bracket. **NOTE: make sure to use small zip ties on ALL 3/16" hose connections to prevent blow off.**

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55. Install fittings on the waste gate as shown, Top cap 1-vent and 1-plug . Below Diaphragm 1-pressure Fitting, and 2-plugs, and leave the n2o ports empty.



56. Route 3/16" line from the 90 fitting on boost solenoid to air fitting on external waste gate on lower diaphragm .



57. At this time check all routing! Check all fuel lines, wiring, and hose, make sure everything is properly secured and zip tied to prevent rubbing and chaffing!



58. Remove the stock air intake plenum from under side of the hood. **NOTE:** heat on the tabs will help prevent breaking the tabs. Remove all internal ducting.



59. Cut out the provided template and position on plenum as shown. Template will follow plenum mold. Trace the oval hole as shown.



60. Trim the oval hole out as shown

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61. Drill the three 3/16 holes and rivet from the inside as shown, Remove the foam from around stock air intake Install the frog skin over the stock air hole on plenum.



62. Install the silicone hose to turbo with two clamps, leave loose install silicone onto adapter on hood only one clamps will be used here for easy hood removal.. Adjust for fit and tighten.



64. Reinstall-Fuel Tank, seat and Hood . Attach the control box using supplied Velcro Route the Boost pressure line from the control box to the push to connect fitting on the Air box or Cooler.



65. Install the Clutch Kit , Primary spring, and clutch weights, Install Secondary spring and Helix. Recommended helix start: 40-46-36, if less RPM desired 42-48-36 Faster up shift.