



## Polaris RZR Turbo Verti-Flow Big Core Billet Intercooler Installation



### Tools Needed:

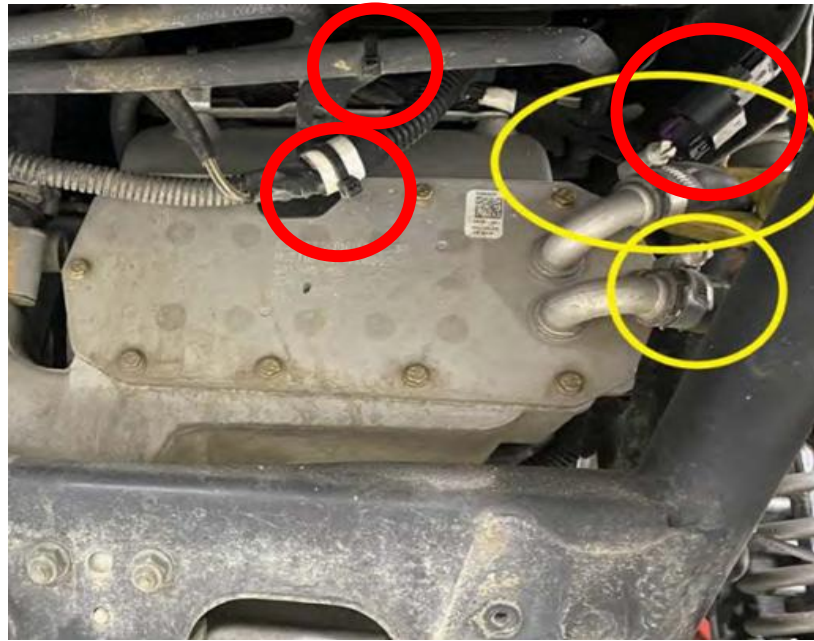
- Ratchet
- Extension
- 8mm Socket
- 10mm Socket
- Torque Wrench
- Clip Removal Tool
- Hose Pinch-off Pliers
- Flat Head Screwdriver



1. Remove the rear fascia, muffler, and heat shield behind the muffler. This will give you full access to the intercooler and intake manifold. If you are installing this into a Pro model or Turbo R, remove the bed to gain more access from the top.



2. Using a body clip removal tool, remove the wire tie down, hose tie down, and o2 sensor connector from the factory brackets circled in red. Unplug the TMAP sensor and move the wiring out of the way of the intercooler. Leave the TMAP sensor installed in the charge tube.



3. Pinch the rubber coolant lines, circled in yellow, going to the stock intercooler in order to prevent losing any more coolant than needed. Once pinched, loosen hose clamps and remove rubber hose from stock intercooler spigots.

**Note:** Some models (Pro XP, Pro S, Turbo R) will require the intake manifold to be loosened to get the intercooler out around the rear frame rail. If you are installing this IC into a 2016-2021 XP Turbo or a 2018-2021 Turbo S, the intake manifold can remain in place, just remove the rear sub frame and proceed to step 4.

3a. Clean the intake manifold and intake boots to prevent any debris from falling into the intake when the manifold is removed. Remove and keep the lower mounting bolt and nut from the intake manifold.



Driver Side (Nut)



Passenger Side (Bolt)



3b. Loosen the (2) v-band clamps that hold the manifold to the rubber boots. Open the clamps and slide them down the boot to release the intake manifold. Be careful not to damage the intake boots when pulling the manifold away from them. The manifold just needs to be lifted and turned towards the driver side enough to get the intercooler out around the rear frame.

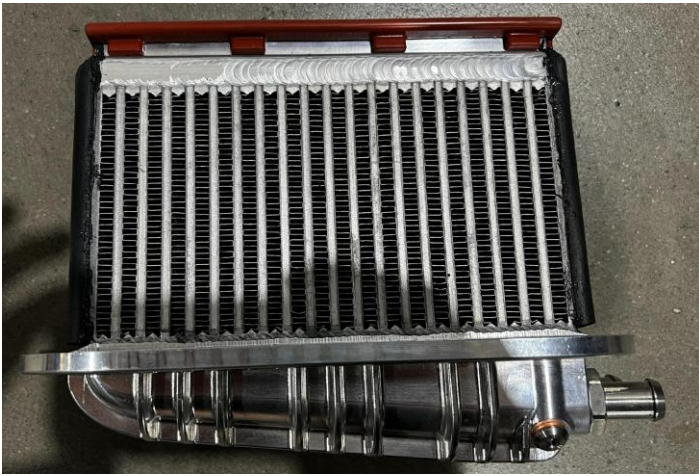
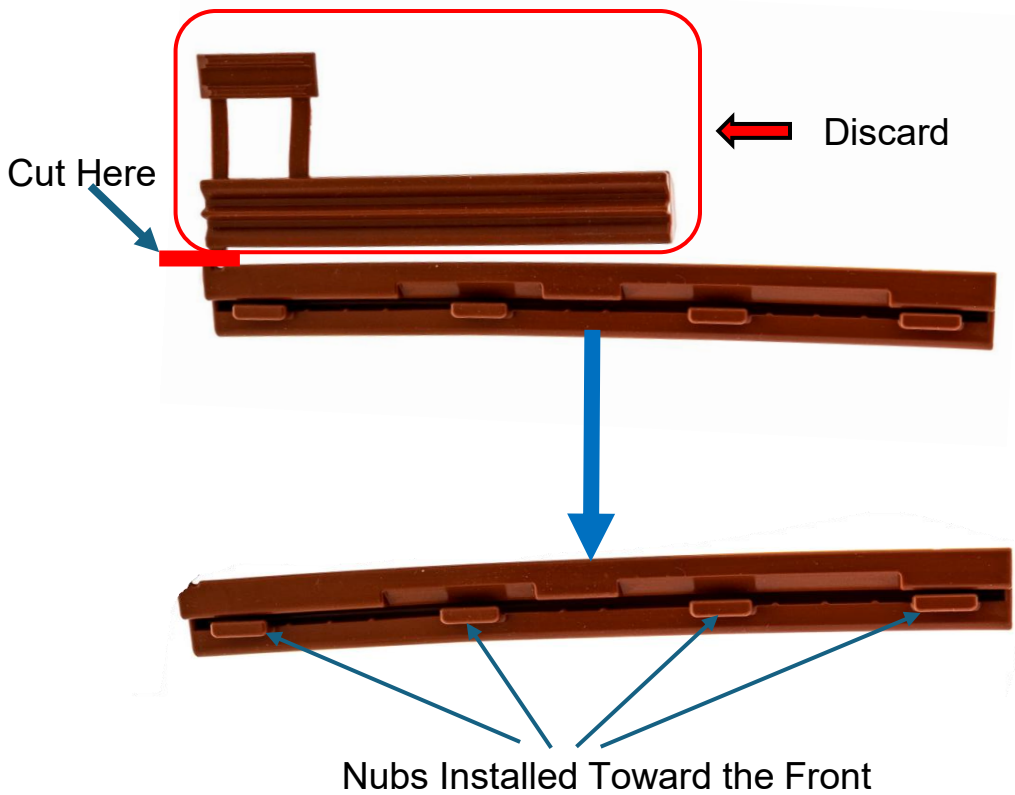
4. Remove all 10 of the 6mm (8mm hex head) bolts holding the factory intercooler in place and remove the intercooler. The intercooler will likely be full of coolant if it has not failed. Carry it with the spigots facing up so you can empty it into a container and dispose of the coolant properly or reuse it if needed. Always wear safety glasses and gloves when handling coolant.

5. Thoroughly clean the inside of the intake plenum removing any residual coolant from a failure or dirt/dust. Be sure the top sealing gasket and mating areas are clean and free of debris. Inspect thread holes and be sure they are clean and free of debris.



6. Thoroughly clean the outside of the intercooler, wiping it clean, blowing air through and past it, removing any dust, and grease from handling and/or shipping.

7. Cut the intercooler seal as shown below. Install the seal onto the bottom of the intercooler as shown in the images below. During reinstallation be very careful and certain that the gasket remains seated and centered on the intercooler.



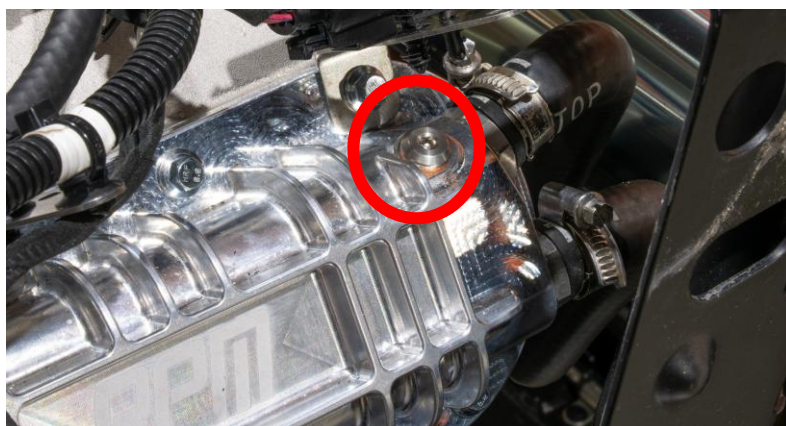
8. Install the new RPM Intercooler using the supplied hardware. Install the provided wire/hose mount brackets, as shown. Partially thread each bolt before tightening any of the hardware. Tighten the bolts in a zigzag manner to equally distribute pressure. Recommended torque: 7 ft-lb.



9. Reinstall the rubber coolant hoses and tighten the worm gear clamps. Plug in the TMAP sensor and reinstall heat shields and muffler. If you had to remove the manifold in step 3, carefully reinstall it into the intake boots and position the v-band clamps where you can get to the nut easily. Reinstall the lower mounting bolt and tighten all the hardware evenly.



10. Loosen the bleeder screw, circled in red, and start the engine to bleed air from the coolant system. During the bleeding process, maintain proper coolant level in the reservoir. Allow the car to get up to operating temp so that the thermostat opens. Bleed the coolant system until no more air bubbles come from the bleeder screw, only a solid stream of coolant. Repeat the process until you are confident that there are no more air bubbles trapped in the system. Clean area thoroughly after coolant bleeding process is complete.



**NOTES:** If you're replacing your IC due to a failure, you can expect some smoke on initial start up from residual coolant in the intake tracts. If that is the case, we recommend replacing the spark plugs at this time as well. It is normal to have residual oil in the intake if you're not running one of our catch cans.