

# 2017-2021 Polaris RZR Turbo/S Dynomite 270 2.0 Turbo Kit

SKU(s): 600FP0017

### **INCLUDED PARTS**

(1) DM-270 2.0 Turbocharger
Assembly

- (1) Set 1300cc Fuel Injectors with Adaptors and Spacers
- (1) Maptuner or CodeShooter Dynomite Flash
- (1) EVP Charge Tube Kit (Color Options)
- (1) V-Flow Intake Kit (Color Options)
- (1) EVP Blow Off Valve 2.0 Kit
- (1) High Pressure Fuel Pump Kit
- (1) XR Series EVP Head Studs
- (1) Turbo Water Coolant Kit

## **REQUIRED TOOLS**

Torque Wrench
Anti-Seize/ Penetrating Lube
Flat Head Screwdriver
Metric Socket Set
Metric Open End Wrench Set
Pinch Clamp Tool
Motor Oil
Engine Coolant
Torx Sockets
Grinder





	XP Turbo/S Dynomite Install Kit
26"	HPS 3/8" Silicone Water Hose
26"	HPS 3/8" Silicone Water Hose
2	Glass Filled Black Nylon T 3/8" Barb ID
4	19.2mm Pinch Clamp
4	22.0mm Pinch Clamp
1	DS/DM Oil Drain Gasket
2	M6-1.0 x 14mm Socket Head Screw SS
2	M6 SS Washer

**NOTE:** Free Flowing Exhaust is Required

**NOTE:** Follow octane rating requirements for the proper ECU tune. NOTE: STM clutches, weights and springs are recommended.

**NOTE:** Crack pressure is set at 6.5psi.

E85		110 Octane		91 Octane	
Boost	Crank	Boost	Crank	Boost	Crank
PSI	HP	PSI	HP	PSI	HP
27	270	27	265	16-18	185



# By purchasing this kit, you understand and agree to the following:

<u>NOTE:</u> Expect 24–48-hour delay from the time you request a tune to when the file is enabled. Please create your Maptuner or CodeShooter account before starting the project.

Email us at: <u>maptunerx@evopowersports.com</u>

Email us at: <a href="mailto:cshelp@evopowersports.com">cshelp@evopowersports.com</a>

Phone Number: 715-248-5163

This is a high-performance upgrade!!!! Although we have gone through great lengths to build safety into the upgrade turbo kit, the fact is installing any performance upgrade and/or turbo system requires care in both operation and installation. Poor fuel, improper setup or any number of things that are done incorrectly can damage your engine!

- You have likely voided the sound and exhaust emission standards of your country if applicable
- This upgrade is intended for OFFROAD and RACING use only
- This is a performance upgrade which may shorten the life of your engine, especially if installed incorrectly or operated without regard to your instruments
- The fuel requirements must be adhered to!!!! Poor fuel can destroy an engine in seconds!!!
- Evolution Powersports bears no responsibility for damage caused to your vehicle by the
  installation of EVP products. The warranty on big turbo kits is 30 days from the date of
  purchase. Evolution Powersports, at its discretion will determine whether a part meets the
  warranty requirements. In no case is there any warranty from EVP for your vehicle or
  vehicles drivetrain. Although we have been careful to supply you with the highest quality
  parts possible, we assume no liability for damage to vehicle or personal injury from installing
  or using any of our products.
- The installation of this kit is technical and mechanical in nature with many opportunities to make mistakes mistakes that can be very costly! If you are not qualified to install this kit, don't do it!! Bring it to one of our qualified installation centers to do the installation.
- This kit will make your vehicle faster, climb higher and accelerate more quickly and take a longer distance to brake than a stock tuned vehicle. If you are not capable of controlling the vehicle with the added performance, do not install the kit.
- High boost is hard on spark plugs they must be changed frequently. If you experience misfire issues – Gap and replace the spark plugs!
- A full exhaust and clutching are required for this kit and can be purchased separately



#### READ THROUGH ALL INSTRUCTIONS PRIOR TO BEGINNING THIS INSTALLATION

- Step 1: Although the kit can be installed without removing the bed, it is highly recommended to remove it for better access.
- Step 2: Install 1300cc fuel injectors. See Instructions "XP Turbo/S & Pro XP 1300cc Injector, Set of 2"
- Step 3: With a 10mm socket remove the heat shields over the top of the engine and heat shields attached to the header/turbocharger.
- **Step 4:** With an 11mm socket remove OEM charge tube, intake pipe and airbox.
- Step 5: Soak the bolts holding the down pipe (turbo exhaust pipe) to the turbocharger with PB Blaster or other penetrating lubricant and let sit for 30 minutes, then remove and clean with a shop rag. Save gasket.
- Step 6: Remove oil drain hose from turbocharger, but leave it connected to the engine.
- Step 7: Label the vacuum lines going to the wastegate actuator and compressor cover turbo port and disconnect from turbocharger.
- Step 8: Remove the 13mm oil supply banjo bolt from the top of the OEM turbo. Make sure to save both copper washers as well as the banjo bolt.
- Step 9: Remove the fasteners connecting to the top of the OEM turbo support bracket (TSB) to the turbo charger (reference the shop manual pages at the end of these instructions.)
- **Step 10:** Loosen the (4) bolts securing the TSB to the frame and pull toward the front of the vehicle to give enough clearance to remove the OEM turbocharger.
- Step 11: Remove the turbocharger from the engine by removing the (4) hex nuts and (2) socket head bolts. A ball nosed Allen socket with an extension works best for the socket head bolts.
- **Step 12:** Remove the OEM turbocharger from the engine.
- **Step 13:** Transfer the OEM turbo charger to a clean workbench.
- Step 14: Install the Dynomite turbocharger onto the engine and secure with (2) nuts.
- Step 15: Before permanently installing the turbo support bracket (TSB), install all turbo to engine fasteners- socket head cap screws and nuts. The nuts are to be torqued to 26 ft lbs and the socket head cap screws to 17 ft lbs. (Figure 1)





Figure 1

- Step 16: Install the OEM support bracket bottom frame. Re-use the bolts and nuts that originally held the turbocharger to the top of the OEM support bracket and tighten.
- Step 17: Install both 26" turbo coolant lines onto the turbo coolant fittings. Clamp them both with 19mm pinch clamps. **NOTE:** It is easier to slide the pinch clamp onto the fitting first, then the coolant hose.
- **Step 18:** Install the (2) supplied "T" fittings into the coolant hoses. The 3/8" fittings will slide into the OEM coolant hoses, clamp with (2) 22mm pinch clamps per hose. (Figure 2).
- Step 19: Route the (2) turbo coolant lines around the turbo and down to the "T" fittings. Slide both hoses onto the 1/4" fitting. Clamp with supplied 19mm clamps. (Figure 3).



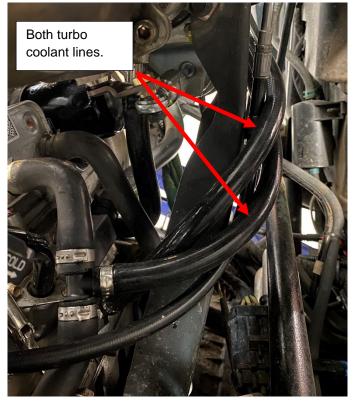




Figure 2 Figure 3

- Step 20: Using the supplied syringe put oil in the oil supply boss, then install the oil supply line and banjo bolt reusing the copper washers - one on each side of the banjo bolt. Torque the oil supply banjo bolt to 33 ft lbs.
- **Step 21:** Install EVP charge tube, re-use the OEM intercooler T bolt clamp.
- Step 22: Reconnect the vacuum lines to the turbo compressor port and wastegate port (make sure they are connected to their designated positions.)
- **Step 23:** Connect the oil drain line re-using the OEM spring clamp.
- Step 24: Reinstall the exhaust downpipe re-using the OEM steel gasket and bolts it is best to use anti-seize on the downpipe to the turbo bolts prior to installation.
- Step 25: Grab the turbo heat shield, you will have to grind (2) areas away now that the turbo has coolant lines. See figure 4-5.





Figure 5

**Step 26:** Grab the exhaust to bed heat shield, you will need to make square cut outs on it for the new turbo coolant hoses to pass. See figure 6-7.







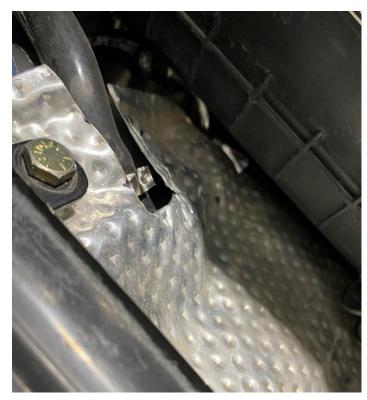


Figure 7 Figure 6

- **Step 27:** Reinstall the intake elbow and airbox.
- Step 28: Reinstall the bed and all plastic pieces.
- **Step 29:** Install clutching STM clutches, weights and springs are **recommended.**
- Step 30: Once the vehicle is complete, key on NOTE: DO NOT start the vehicle. Make sure you hear the fuel pump.
- **Step 31:** Start vehicle and let it idle. Check for leaks.
- Step 32: Allow vehicle to warm up (160-degree water temperature).

## Launch Control (optional)

NOTE: If Launch Control has been purchased as part of this kit, your engagement RPMs MUST be raised to at least 2100-2500 RPMs. The reason is big turbos require more energy to spool and it takes more RPMs to generate enough heat. Although Launch Control will work at 2100 RPM, it cannot build more than a few lbs of boost at 2100. At 2500RPMs, 5-6 lbs of boost at sea level and modest air temperatures is possible.

## Clutching

**NOTE:** Clutching for 270 kit must be adjusted for an **8600-8800 RPM** shift out. THIS IS VERY IMPORTANT!

Thank you for choosing Evolution Powersports products. If you require further assistance, please call our Tech Support @ (715) 247-3862

**Note:** This product is exempt from the emission standards and related requirements of 40 C.F.R. § 1051 as provided by 40 C.F.R. § 1051.620, and California law [e.g., vehicle code§§ 27156 and 38391]. This product is sold only for use in connection with EPA certified, purpose-built, nonroad vehicles used solely for closed course, nonroad competition/racing and not used for any recreational purpose or on public highways or right of ways maintained by and open to the public. This product is sold only in connection with machines that do not fall under state and/or federal noise or emission standards/regulations. Purchasers who/that purchase this product represent and warrant that the product is purchased only in connection with EPA -certified, emission-regulations-exempt and noise-regulations-exempt competition/racing vehicles as interpreted under applicable state and/or federal law. Questions: Call Evolution Powersports at (715) 247-3862.