

Before starting installation unbox all turbo kit contents and organize on a cart or table

Preparing UTV

1. Remove the factory upper roll cage/ roof panel as an assembly. Remove the rear plastic bed. Leave these items off until the last steps of the turbo kit installation is complete
2. Before using this turbo kit you will need to remove the engine and have a qualified shop disassemble and reassemble it using DLP supplied connecting rods and pistons. Use the factory service manual as a guide. Be sure to follow all factory torque specifications
3. Drain coolant per the Yamaha service manual. Do not refill coolant until the very end of the installation
4. Remove the (6x) 12mm head nuts and (1x) 10mm head bolt from the exhaust header. Pull it off and set it aside (you will not need this anymore)
5. Remove emissions plates and tubes from the valve cover with 4mm allen. Unplug the solenoid and remove it from the chassis bracket. These parts will not be reused
6. Install the black DLP block off plates (pictured on page 3) but keep the bolts loose on the large plate (a bracket will be installed later using those bolts)
7. Cut off the bracket pictured below from the chassis. (**TAKE CAUTION not to damage the wiring directly behind it)
8. Remove the (2x) 10mm head bolts that hold the factory plastic intake box on. The front intake box bolt, directly behind the passenger seat, will require a long extension to remove

9. Remove the rubber line that goes from the top of the plastic oil tank breather to the factory air box. Install supplied mini air filter in its place
10. Loosen the intake side clamps on the throttle bodies and unplug the intake air temp sensor. Remove the intake box. (It is recommend that the open throttle body ports get covered to avoid getting debris in the engine)
11. Remove the factory rearmost map sensor along with the the short vacuum line connected to it.(Pictured below)
12. Install DLP upgraded injectors (Take caution not to lose the small rubber grommets on the fuel rail).
13. Remove the two small rubber caps from the throttle body. (pictured below) One is next to the rearmost injector and one is next to the middle injector.



14. Install the supplied Blow Off Valve vacuum lines into their places. It will be labeled BOV. This end will run along the valve cover towards the front of UTV. (as pictured) (it will get hooked up to the Blow Off Valve after the turbo is installed)



It is recommended that you zip tie all of the vacuum line connections to prevent any boost leaks



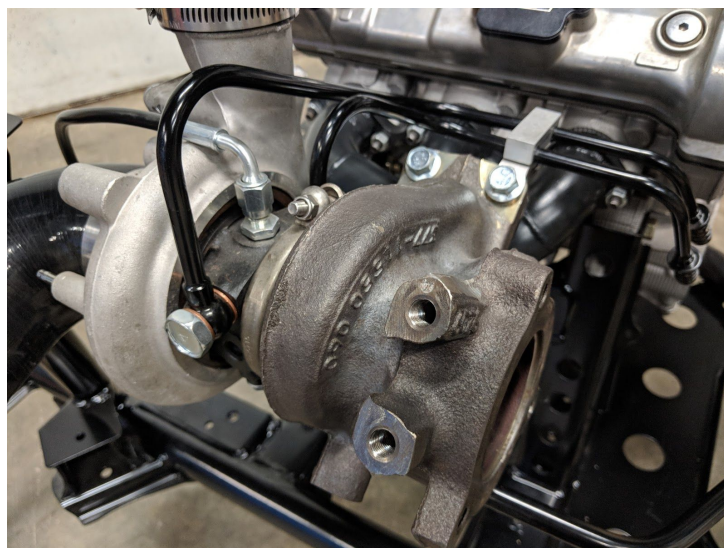
15. Install the new supplied map sensor into the same place of the factory one using the original mounting bolt. Use the supplied vacuum line and verify the line is not kinked
16. Remove the factory air temp sensor from the intake box and install it into the intercooler with supplied M5 allen head bolt
17. Install the intercooler fan shroud to the intercooler using (2x) M6 x 12mm bolts on the throttle body side and the (2x) M6 x 16mm bolts on the turbo side.
(leave the driver side fan shroud bolts loose for later install of bracket)
18. Install the fan to the shroud using the short M6 x 12mm bolts. ** It is recommend to use blue loctite on all bolts**

Installation of main components

1. Install the turbo manifold onto the engine. Make sure copper ring gaskets are in all holes



2. Using the short end of the (4x) supplied studs, thread two into the manifold, and two onto the turbo
3. Install turbo on to the manifold with the supplied gasket. (make sure the gasket is the correct way, it has an offset center hole) Torque to 50 ft lbs



4. Remove the oil pressure sensor with a 24mm socket. (located below the exhaust manifold next to the oil filter) Place an oil bucket or rags underneath.
5. Remove the zip tie holding the ground wire to the chassis and remove the 10MM head bolt from the engine. (This bolt will not be reused)
6. Use thread sealant and install the sensor back into the (M) position of the supplied billet oil block.
7. Install the supplied -3an to 1/8 npt adapter into the (S) position of the oil block using thread sealant. Install the 1/8 npt plug into the side (S) position (unless an oil warning light or gauge is being used)
8. Install the DLP oil block with supplied M6 bolts and o-ring into the factory oil pressure sensor location (recommend using blue loctite) (Do not forget to re-install ground wire to the top bolt)
9. Install the rubber grommet into the 2nd hole up on the chassis below the turbo. (Pictured below)
10. Install the straight end of the black -3AN oil feed line through grommet and install it to the oil block fitting (Pictured below)



1. Install the 90 degree end of black -3AN oil feed line to the top turbo fitting and route the line toward the firewall. (Orientation pictured on the previous page)
2. Now you can hook up the BOV labeled vacuum line up to the blow off valve nipple on the turbo
3. Place the short silicone couplers onto the throttle bodies and slide clamps over the couplers. Position the lower clamps to keep full throttle actuation
4. Position the intercooler assembly (take care not to damage the fins on the intercooler) Then from the passenger side, position the tubes into the throttle body couplers. Wait to tighten clamps to make the rest of the install easier

5. Reach your hand in between intercooler and engine and plug the air temp sensor in
 6. Position the drivers side of the intercooler into the coupler on the turbo
 7. Verify the throttle body couplers are straight and tighten the intercooler to throttle body clamps. They do not have stops like the factory to keep them level. **NOTE: make sure to position the clamps so they do not restrict the throttle body from actuating**
- *IMPORTANT (If the boots are not positioned correctly, a boost leak may occur)**
8. Using the supplied hose clamp, reattach your idle air valve hose to the black nipple on the intercooler
 9. On the passenger side, install the tubular intercooler brackets using the short 10mm head bolt to the intercooler and the 12mm head nut and bolt to the ears on the engine block (Pictured below)
 10. On the driver side install the sheet metal bracket into the large block off plate bolts and the fan shroud bolts. Previously left loose (Pictured on the next page)
 11. The turbo to intercooler coupler clamps can now be tightened



Odds and ends

1. Remove the OEM U-shaped coolant line on the factory oil cooler (pictured below)
2. Install the adapter fittings into both sides of the turbo with the included sealing washers. Take care not to overtighten the fittings as they will break if overtightened
3. Install the coolant line with the 120 degree fitting to the adapter fitting on the outside of the turbo and the coolant line with the 45 degree fitting to the inside
4. Route both coolant lines above the exhaust just below the bed
5. Install the 4 inch rubber hoses to the barbed end of both lines with the clamps supplied. Install both lines in place of the “C” shaped hose that was previously removed and secure with clamps
6. Secure both coolant lines to the frame above the exhaust (verify rubber lines are not kinked or rubbing on anything sharp)



7. Install the supplied flanged oil hard line to the bottom of the turbo with the supplied gasket and bolts using M6 x 16mm long bolts supplied
8. Remove the plastic stator cover plug with a 10MM allen. Install supplied billet plug with supplied O-ring. Then install the -8AN 90 degree fitting into cover (as pictured below)



9. Install the oil soft line with the 45 degree line to the 90 degree fitting previously installed. This fitting should be angled about 45 degrees up. Install the other end of the soft line onto the oil drain hard line with the supplied clamp. **Secure this line out of the way of the rear parking brake rotor**
10. Install the muffler of your choice (OEM muffler may be used with or without spark arrestor)
**There will be a noticeable HP loss with spark arrestor still installed
11. Install the 3 bolt flange exhaust tube from turbo to muffler using the gasket and 3 supplied bolts, use the factory clamp for the muffler (As pictured on the next page)



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12. Install the turbo mounting bracket to the chassis and the turbo. (as pictured above) Then using the short (2x) 14mm head bolt to install the mounting bracket to the turbo and then the 10mm head nuts and bolts install the turbo mounting bracket to the roll cage bracket
13. Install the Intercooler scoop onto the intercooler using (4x) M6 by 12mm bolts with blue loctite (These bolts are pre installed on the top of the intercooler)

Cargo Bed Installation

If you are not using the factory rear cargo bed, skip to intake installation

1. Cut out the templates at the end of the instructions
2. Tape the #1 template to the bottom of the driver's side cargo bed compartment
3. Cut out the hole outlined in the center of the template
4. The #2 template will be taped above the factory air inlet hole on the bed
5. Cut out the plastic around the template to open up the hole
6. The bed will need to be trimmed to fit the intercooler underneath. Cut a half inch below the sticker to the right of the picture below and follow the white cut line. The part below the white line will then be discarded



Intake Installation

If using the factory rear cargo bed, use the template at the end of these instructions to cut a hole for the intake pipe.

1. Install 90 degree silicone coupler on to turbo inlet
2. Install the brass nipple hose barb into the air intake tube
3. Feed the straight end of the intake tube through the bed first, then install it to the other end to the 90 degree coupler
4. Hook up the vacuum line from the boost controller to the brass barb on the intake tube
5. Install 45 degree 3" to 3.5" coupler (factory roll cage only)
6. Install airbox on to the coupler. Use the supplied roll cage mount bracket to mount the air box (The air box can clock all different directions. clock it correctly before tightening the 2 allen head bolts on the bracket. This will lock it into place)

Install fan wiring harness

1. Hook up the positive and negative wire to the battery (orange is positive)
2. Drill a 1/4" hole in side of factory plastic to mount the relay (SEE PICTURE)
3. Run the intercooler fan plug (short part of harness) through the factory plastic and plug the fan in.
4. The longer part of the harness will run along the passenger side console area to the front of the car. You will need to remove the center shifter plastic and few of the clips for the side panel. You can tuck the harness into the factory rubber sound deadening material or zip tie to the factory harness
5. Remove the hood ((2x) allen head bolts) to get access to the front side of the firewall, Unplug the white connector for accessory(cigarette) outlet and plug in the wiring harness in-line
6. Plug in the connector on the wastegate solenoid to the connector removed from the air injection solenoid (pictured on the first page)



Final assembly

1. Verify engine oil is at the correct level. Fill and bleed coolant system
 2. Reinstall the rear covers, center console, and roll cage
 3. Install the 91 octane sticker next to the fuel fill cap and the intercooler sticker over the inlet hole
 4. AFTER FIRST HEAT CYCLE, RETIGHTEN ALL OF THE EXHAUST HARDWARE
- **Periodically check the tightness of all exhaust hardware after turbo install is complete****

