

# Introduction to Carbureted Turbo Kit installation

- ◀ The following procedures should be followed in the order they are listed to avoid extra work. The installation should take 8-10 hours. The tools you will need are standard hand tools. Included in the kit are all necessary drills and taps needed for the installation. Footnotes are provided to help with additional problems you might encounter.
- ◀ Trask Performance has designed the **TRASK** turbo system to provide usable, dependable horsepower for many trouble free miles. It was intended to make 8 lbs of boost on 91 or higher octane fuel. At this level the bike should make 110 horsepower. If the customer chooses to increase the boost level, the fuel system will have to be tuned and other modifications may be needed to supply enough fuel for higher levels of performance. Also engine modifications may be needed to support higher levels of horsepower. Trask Performance does not recommend raising boost levels beyond the kit-preset levels unless you make the proper modifications. Expensive engine damage may result if these warnings are not observed. With that said lets get started.
- ◀ If you increase boost level above the kit settings, the bike will need to be tuned to insure the engine doesn't run dangerously lean, resulting in engine damage.

**NOTE:** For maximum power, we recommend having the bike dyno tuned to achieve maximum power potential. Air fuel ratio should be set around 13.2 cruise and 12.5 – 12.8 for power. Running to lean will result in temperature increase and engine damage may occur.

# SOFTAIL/DYNA/FL CARBURETED TURBO KIT INSTALLATION PROCEDURES

1. Disconnect Battery!
2. Remove the exhaust system, air filter and backing plate. Remove and discard your spark plugs. Install the plugs supplied in the kit, gap .034" and use anti-seize on threads.
3. Drain the fuel from the tank into a fuel can. Remove the fuel tank. Remove the carburetor. Remove the horn assembly from the engine motor mount support plate. (See Photo 1's) At this point you may want to replace your intake seals. Old seals may leak with boost pressure. Take the extra time to prevent problems later. Remove the case bolt at the base of the cylinders. Install the fuel pump/regulator assembly with the new bolts provided. (See Photo 2) Use blue loctite. Route the fuel lines to their designated locations. One output feed to the carburetor. Use fuel line sheath off your stock fuel line to avoid chafing the line. Now, route the regulator bypass line, it has the "T" fitting installed, route this to the front of the bike. This will t-into the fuel crossover on your fuel tank. Install the carburetor provided in the kit, modified Mikuni 42mm. (See Photo 3) Hook up the fuel feed line from the regulator and secure with a clamp. Connect the regulator boost line to the fitting on the back of the canister. Secure with a cable tie. Connect and adjust throttle and idle cables.
4. Remove the cam cover and replace it with the supplied billet cover and new casket.
5. Remove from your old exhaust system 2-exhaust flanges and 2-retaining rings. Install onto the Trask Turbo header. Apply some ultra copper RTV silicone on the rear slip fit pipe to aid in install. Put exhaust clamp provided on the slip fit and assemble the header, leave loose. Install the header on the engine and use the 4 new exhaust nuts provided. Tighten the pipe to the heads only enough to hold with enough movement to align the system later. (See Photo 5)

6. Remove the oil pressure switch; install the aluminum adapter with thread sealer. There are two holes tapped into the adapter; the ¼ NPT should point down and the 1/8 NPT should point up. Install the oil pressure switch with thread sealer on the bottom side and the 1/8 NPT - #3 AN on the top. (See Photo 6's)
7. Tighten the rear exhaust flange evenly first. Then the front exhaust flange. Next tighten the slip fit clamp.
8. Install the oil drain line onto the fitting on the cam cover (see photo). The adapter should face up. Tighten the clamp after the turbo is installed. This line will need to be trimmed to length after the turbo is installed. (See Photo 8's)
9. Install the supplied gasket onto the tail pipe flange. Bolt the tail pipe to the turbine housing. Install the supplied gasket onto the 4-bolt flange. Set the turbo and tail pipe assembly onto the flange. Start the 3/8 tail pipe support bolt. Start all four header to turbo bolts & nuts, trim to length and hook up the oil drain line per photos to the turbo. Use red loctite on the 2 6mm bolts and don't forget the gasket. (See Photo 9's) After the oil drain is on, tighten the hose clamps (2). Now tighten the four header to turbo bolts, the 3/8 tail pipe support bolt, the four exhaust flange bolts and the slip fit clamp. Route the oil feed line from the feed adapter to the turbo. Use care when you route the line. The exhaust is hot, be careful not to melt the Teflon line. See photo on how to rotate the hose end, if needed. (See Photo 10's) If the oil drain line is too close to the header, you can slightly rotate the turbo cartridge. Be sure to tighten all eight bolts or damage to the system will occur! (See Photo 11's)
10. Install the tail pipe heat shield.
11. Install the breathers on the heads. Install the canister onto the carburetor. Use blue loctite on the breather bolts. Install the stock choke cable using the Mikuni plunger. Connect the turbo to the canister with the 2" dia. 90° silicone elbow. Install the canister cover and the air filter.

12. Connect the boost line to the 1/8" barb fitting on the back of the canister. Connect the fuel pump power (red) wire to the battery (+positive) with an inline fuse. The other wire is the relay signal wire. This will click the relay and should be connected to a source controlled by a run/stop switch. We recommend the coil power feed source.
13. Install performance clutch spring, (refer to service manual for procedure). Gaskets are included in the kit
14. Re-install your fuel tank. Connect the return line "T" fitting onto the crossover line. Install the fuel filter between the fuel pump and the petcock. We recommend using a Pingel petcock. Your stock petcock requires a vacuum signal to flow fuel, the Pingel does not. Fuel up your bike, check your oil and connect the battery. Turn on. (See Photo 12's)
15. Start up, check fuel pressure at idle (should be 3 – 3.5 lbs), and check for oil leaks. You can check pressure off one of the regulator outlets or "T" into the carb feed line. Install cover after tuned. The system needs to be tuned on a Dynamometer to ensure optimum performance by an experienced Dyno operator.

**NOTE: If you plan to drag race your bike, we recommend using 100 Octane fuel.**

# Trouble Shooting

The following is a trouble-shooting guide, for our carbureted turbo kits.

1. When on start-up, bike won't idle below 2,500 rpm.
  - Check intake leaks.
  - Check fuel pressure – 3 lbs @ idle. Regulator will come preset but may need final adjustment.
2. Lack of power.
  - Check BOV on front of surge canister. Make sure valve is sealing.
  - Check for leaks in canister, cracks, etc.
3. Heavy Surge/Bucking when at cruise.
  - Check fuel delivery at cruise. Raise needle one position.
  - Call Trask Performance for remedy.
4. Smoking out tailpipe.
  - Make sure turbo drain hose is not restricted/kinked.
  - Call Trask Performance Tech. Support.



42 Mikuni – Modified

Sent out with a :

- CF 95 Needle Pos. 4
- 2.3 Pressurized needle & seat
- Pilot 25#
- Mainjet 165#



**NOTE: MAKE SURE NGK DCPR9E**

**SPARK PLUGS ARE INSTALLED WITH**

**THIS SYSTEM AND GAPPED TO .034.**

**ENGINE DAMAGE OR SPARK PLUG**

**FAILURE MAY OCCUR IF CORRECT**

**SPARK PLUGS, REFERENCED ABOVE,**

**ARE NOT INSTALLED.**



**TRASK**<sup>®</sup>  
performance

**!!!! WARNING !!!!**

**THIS PRODUCT IS FOR OFF-ROAD**  
**USE ONLY**

- EACH ENGINE IS DIFFERENT AND MUST BE DYNO-TUNED AFTER INSTALL

**IF YOUR DYNO TECHNICIAN HAS ANY  
QUESTIONS, PLEASE CONTACT RON OR NICK  
AT TRASK PERFORMANCE**

**623-879-8488**



**TRASK**  
*performance*

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## RETURN POLICY

Dear Valued Customer:

We at Trask Performance have found it increasingly difficult to return parts to our suppliers. It is now necessary to tighten our own Return Policy and need your full cooperation in this matter. There will be no exceptions to this policy.

### **Return Policy Procedure**

1. There will be **NO CREDIT TO YOUR CREDIT CARD ACCOUNT OR CASH REFUNDS**. Your monthly statement will **NOT** show any credit when you return an item. Your account with Trask Performance will be issued a credit for merchandise or exchange for the same value.
2. All returns **MUST HAVE A PRIOR AUTHORIZATION NUMBER**.
3. A **RETURN AUTHORIZATION NUMBER AND A COPY OF THE INVOICE** must accompany all returns. Returns will not be accepted without return authorization.
4. Parts authorized for return must be in original packing only. **ABSOLUTELY NO SUBSTITUTIONS WILL BE ACCEPTED**.
5. Parts that were originally shipped in vendor plastic bags, boxes or shrink-wrapped must be returned in that original packing and condition. No writing of any kind is permitted on original supplier packages or boxes. Defaced items will be returned to customer. **NO SUBSTITUTIONS WILL BE ACCEPTED**.
6. Trask Performance must be contacted within 10 days for any returns or problems. **NO RETURNS ACCEPTED AFTER 30 DAYS**.
7. If the return is **NOT** the error of Trask Performance, there will be a **20% RESTOCKING FEE**.

Thank you for your cooperation.



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## **WARRANTY**

NO WARRANTY ON PERFORMANCE WORK. We warranty products to be free in defects in material or workmanship for 12 months from purchase date. In the event of such a defect within the warranty time period, we will, at our discretion, replace or recondition the product at no charge.

We shall not be responsible for any costs, including but not limited to costs resulting from labor charges, shipping charges, delays, vandalism, negligence, fouling caused by foreign materials, damage from adverse air or weather conditions, chemicals, or other circumstances over which we have no control.

This warranty shall be invalid by any abuse, misuse, misapplication or improper installation of these products. Products not manufactured by Trask Performance are covered under the manufacturer's warranty. These products contain their product warranty in the package. Please contact the manufacturer for warranty claims. The installation of some aftermarket products may void your vehicle warranty.

**ALL SALES ARE FINAL**



## TRASK BOOST GAUGE KIT INSTRUCTIONS

1. Remove 2 x clutch perch clamp bolts. Using original washers and supplied longer bolts, install gauge mount.
2. Install gauge into mount, adjust and gently lock down set screw to hold gauge in mount.
3. Route 1/8" plastic boost line from gauge along side of handlebar down to pressure source port. (Trask V-Rod system has a port on front of plenum) Use adapter supplied in the kit to attach pressure line to pressure port fitting.

