VACUUM SOURCE INSTRUCTIONS- LATE MODEL SKI-DOO (05/09/02)

These instructions apply to late model Ski-Doo's having Mikuni TM flatslide carbs and stock pilot jet sizes 20 or less (they do not have a pilot air jet). This includes all 800 twins, 2002 and later 500's, and 2001 and later 600's and 700's. This does not include earlier Mach Z.

The vacuum signal for these models is obtained using the stock DPM vacuum fittings. These are 1/4" fittings pointing to the PTO side exiting exit horizontally under the carb inlet bell about 1/2" on the air box side of the slide and they will be capped (if you do not have DPM). For these applications, the outlet for all products (***TEMPA FLOW, VARI FLOW,*** and ***ATACC***) is connected to the **center** leg of a 1/4" tee (not supplied) using **18"** of 1/4" tubing and then 7" of 1/4" tubing connecting the other two legs of the tee to each DPM fitting.

1. For ***TEMPA FLOW*** applications with elevation change less than 2000 feet and ***ATACC*** applications with elevation change less than 3000 feet, no modification is needed to the DPM vacuum fittings. Simply remove the caps and install outlet tubing.

2. For all other applications (***TEMPA FLOW*** with more than 2000 feet of elevation change, ***ATACC*** with more than 3000 feet of elevation change, and all ***VARI FLOW***'s), the following procedure must be done to **both** carbs:

a. Remove carbs from engine and remove **both** slide cover plates, slides, and front body air intakes held to carb bodies by four screws.

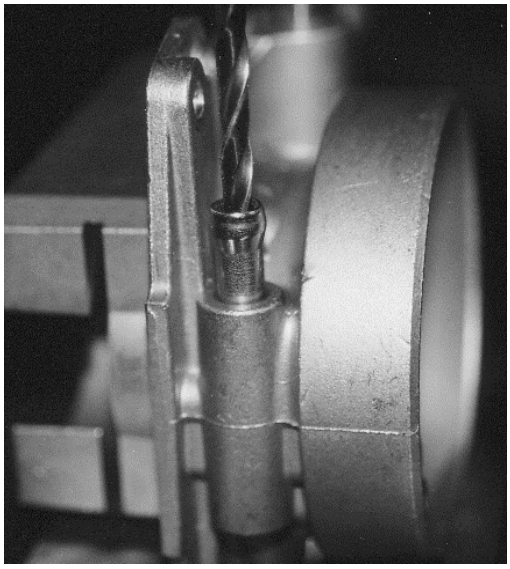
To avoid injury, hold the front bodies in a vise for all drilling operations. Do the following drilling operations on both carb front bodies.

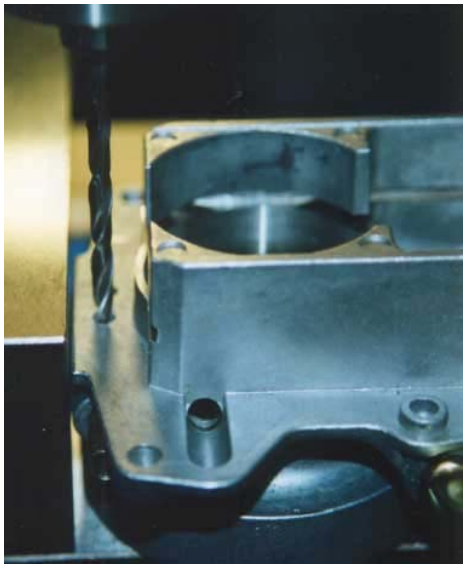
b. Enlarge (drill) the .156" i.d. DPM vacuum fitting to 3/16 (.187)" to a depth of 1.25".

c. On the engine side of the front body there is a feed hole approximately .135" diameter which connects to the DPM vacuum fitting. From the engine side of the front body, enlarge (drill) this hole to 3/16 (.187)" to a depth of approximately .55".

d. In the carb bore there is an angled .104" diameter hole which also connects to the DPM vacuum fitting. From the engine side of the front body, enlarge (drill) this hole to 5/32 (.156)" until you clear out in the 3/16" holes you drilled in **b.** and **c.** above.

e. Clean front bodies and reassemble to carb bodies. Replace slides and cover plates. **Verify free movement of slide.**





ANSWERS TO FREQUENTLY ASKED QUESTIONS FOR *TEMPA FLOW, VARI FLOW, ATACC*

Outlet Tube: The only tubing whose length is critical is the 1/4" i.d. outlet tubing. This length has an affect on air flow through these products and hence an effect on operation. We use the lengths specified to allow use with all applications; if too long, just go the long way around.

Inlet: The 1/2" i.d. inlet tube length has little affect on product operation but shorter is better. Do **not** use plastic 90's to make a sharp bend (they restrict air flow too much) but use the copper sweep elbow described. Do not use any "home-made" filters for the inlet; most don't work and can cause a leaning of the fuel mixture and engine damage. Our filters have been designed and tested to work properly.

Vacuum Source: On all applications except late model Ski-Doo (above) the vacuum signal is obtained from **one** carb only. This simplifies installation and works because the vacuum existing in all carbs will be essentially the same at any throttle position.

Vent Location: The vacuum source draws air into the inlets of these products from the vent location. Many people refuse to accept the importance of proper venting. Maintaining consistent vent pressure with your "stock" vent pressure is critical and is insured by using a vent location for these products which is similar in pressure to that existing before installation. If you have air box venting, you should install the vent for these products in the same compartment as the factory vents. If your carbs are vented under-hood (normally tubes hung down around the carbs), the vent location for these products should also be under the hood, and almost any location under the hood will work if it is somewhat protected from wind currents and contamination. There is **always** a vacuum in any air box, no matter how much it is modified; **that is the reason air goes into it.** Moving the vent from under-hood to air box puts this air box vacuum in the carb float bowls (in addition to the proper vacuum applied by the products) and the fuel mixture will be too lean.

Float Bowl Lines: The length of these 5/32" i.d. lines is not important but shorter is better. Route them like a plumbing drain system; no leaks and no "plumbing traps" which can trap fuel. For carbs with two vent (overflow) fittings, a short tube should be connected to each fitting and run to tee above each carb like a "bucket handle" and then go to other tees or 4-way connector to complete the system (see schematic). Erratic operation after tipping or extreme riding is usually caused by fuel in these lines.