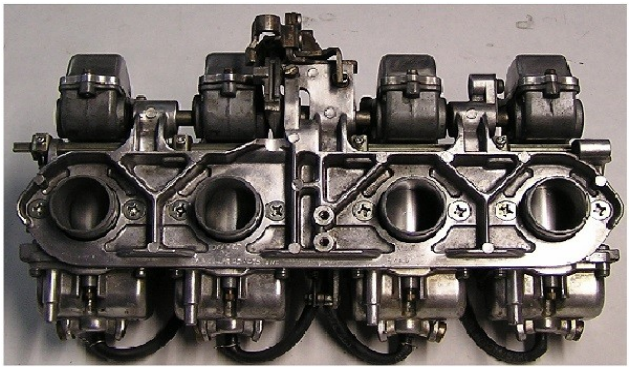
MAXI-BORE™ CARBURETTORS



26mm/28mm Mik bored to 30.5mm

33mm Smoothbores bored to 38.5mm

Don’t just rebuild your carbs – MAXI-BORE™ them!

MAXI-BORE™ carbs are more than just cleaned, rebuilt, or bored, they are MAXI-BORED™.

30.5mm outperform 29mm Smoothbores, at a fraction of the cost. How is this possible?

MAXI-BORE™ carbs look stock on the outside. So, no one will know the power you have on tap. Vastly improved throttle response.

There is no easier, cheaper, more reliable way to build huge, dependable HP gains with your engine. Compatible with ported heads, high lift cams, big bore kits & any exhaust. Multiply the power potential of your engine. If you have a modified motor, why settle for 26mm carbs? You won't believe the difference MAXI-BORE™ carb re-manufacturing will make.

Make your stock motor run with the big bore kit guys. Many engine modifications can reduce the reliability and life of your engine. MAXI-BORE™ carbs can make your stock bike faster than modified bikes, without any of the reliability issues of engine modification. Instant power, OEM reliability, at bargain basement prices!

So, good, even a stock engine will roar with delight.

What’s so special about MAXI-BORE™ carbs?

The MAXI-BORE™ process was developed on a FLOW BENCH! After weeks and weeks of flow testing this design was created. A work of art that combines extreme airflow improvement with vastly improved fuel atomization, and stronger jet signals. You see, liquid fuel can not burn, only vaporized fuel can burn. MAXI-BORE™ carbs are more fuel efficient than your OEM carbs. You get more power and usually better fuel economy. You get more fuel in your engine, and more of that fuel is burned, making more power.

Stock 26mm carbs flow 70cfm (cubic feet per minute) at 10" H20 vacuum.
30.5mm MAXI-BORE™ carbs flow 105cfm.
29mm Smoothbores only flow 98cfm.

So, the total flow increase in your four carbs is a whopping 140cfm!!! That's like adding 2 more 26mm carbs!
Think you understand airflow? Here are some questions that might let you know where you stand on airflow.

Q1: If 26mm Mikuni carbs flow 70cfm @ 10" H2O, which alternative gives you the most HP/$ spent:
A) 29mm Smoothbores that flow 98cfm, keeping engine stock & 26mm carb boots.
B) Port your cylinder heads, keeping stock OEM 26mm carbs.
C) Port your cylinder heads after installing oversized valves, keeping stock OEM 26mm carbs.
D) Install high lift long duration cams in your stock engine, keeping engine stock & 26mm carbs.
E) Install big bore kit, keeping all else stock.
F) Bore your 26mm carbs, leaving all else stock.

Ans: F) Bore your 26mm carbs, leaving all else stock. Why? Your engine is an energy conversion device; it converts thermal energy (burned fuel) into mechanical energy (torque X rpm = HP). If you don't increase the air/fuel (A/F) burned, it can NOT produce more power output.
A) 29mm Smoothbores, used, have recently sold for over $800 on eBay. They may flow 98cfm, but NOT with 26mm OEM carb boots. They may flow 75cfm. So, you're paying about $160/cfm improvement.
B) Your stock head flows about 68cfm. Ported, about 79.9. Cost: $631.45 ($320 port + $311.45 valve job/guides/seals plus cost of gaskets & labor). $53.06/cfm for head work alone.
C) Your stock head flows about 68cfm. Ported with over sized valves, about 86.7cfm. Cost: $1032.00 ($640 port + $192 O.S. valves + $200.00 to open seats up) plus the cost of gaskets & labor. $55.19/cfm for head work alone.
D) This is a trick question. Cams can NOT increase air flow at all rpms. Long duration

cams simply lose low end torque (due to A/F reversion) and may add some top end torque (if lighter retainers and stronger springs are also installed). High lift cams sound good, but on a stock head generally do NOT increase airflow, because any valve lift over .375" does NOTHING to increase air flow. In fact, the intake valve can be removed from the head and a stock port will flow no more than when the valve is opened .375". So, either way you look at it, big, long duration cams may do no good in terms of making more HP. Big lift may do nothing but cost more for springs and retainers. Big duration may lose low end, to add a little bit on top end. Because there are only 720 degrees available in a 4 cycle engine, adding more intake duration will only increase intake reversion (aka fuel stand off), and increased exhaust duration can only reduce the power stroke, reducing your engine's thermodynamic efficiency. No matter how you slice it, traditional high lift, long duration cams are of little help in the real world, because they offer almost no overall air flow increase. (Hint: there are more modern types of camshafts that I am NOT discussing here.)
E) This is a trick question. Big pistons can NOT increase air flow. Big pistons can increase low end torque (due to increased bore area), BUT CAN NOT improve top end power (because the intake tract will run out of air fuel at a lower rpm with a bigger engine, thereby reducing top end power). But, there is NO air flow increase because of a big bore kit.
F) MAXI-BORE™ carbs flow 105cfm (with 26mm boots air flowed & ported also). **35cfm/carb flow increase means your paying only $14.28/cfm.**

When I built my little D Modified drag race GS750 Suzuki back in 1977, I did it one step at a time to see what really made a difference. First, I put in a 850cc high compression piston kit. No change. I then added Yosh road race cams, valve springs & aluminum retainers. A very small improvement. Installed a UFO (Universal Four into One). I lost low end, to gain very little on top end. Installed bigger carbs. **Yes.** More power was on tap. From there, I ported the head and bored the carbs to become competitive. The magazines just want to sell you something so that their advertisers will buy bigger ads. Magazine celebrities don't know anything about engines, math, science, chemistry, or any other science, they know only word games.

Q2: If your stock engine head intake flows 68cfm, and your stock 26mm carbs flow 70cfm, with no air cleaners, what amount of air/fuel flows through both when connected together with the OEM 26mm boot?
A) 68cfm.
B) 70cfm
C) 138cfm
D) 35cfm
E) 34cfm

Answer: E) 34.49cfm This is the comparative air fuel each cylinder can burn.

Comparative because the intake valve is always either opening or closing, reducing real air flow through the system, so let's keep it simple and just look at the components to air flow.

Q3: If your stock engine head intake flows 68cfm, and your stock 26mm carbs flow 70cfm, with no air cleaners, what amount of air/fuel flows through both, when you install MAXI-BORE™ carbs together with the MAXI-BORE™ flowed 26mm boot, what air flow comparison should you see?
A) 68cfm.
B) 70cfm
C) 41cfm
D) 35cfm
E) 34cfm

Answer: C) 41.27cfm This is the comparative air fuel each cylinder can burn with MAXI-BORE™ carbs.

Q4: If your ported head intake flows 79.9cfm, and your stock 26mm carbs flow 70cfm, with no air cleaners, what amount of air/fuel flows through both, when you install MAXI-BORE™ carbs together with the MAXI-BORE™ flowed 26mm boot, what air flow comparison should you see?
A) 68cfm.
B) 45cfm
C) 41cfm
D) 35cfm
E) 34cfm

Answer: B) 45.37cfm This is the comparative air fuel each cylinder can burn with MAXI-BORE™ carbs.

Q5: If your ported head, with over sized intake valves, flows 86.4cfm, and your stock 26mm carbs flow 70cfm, with no air cleaners, what amount of air/fuel flows through both, when you install MAXI-BORE™ carbs together with the MAXI-BORE™ flowed 26mm boot, what air flow comparison should you see?
A) 47cfm.
B) 45cfm
C) 41cfm
D) 35cfm
E) 34cfm

Answer: A) 47.40cfm This is the comparative air fuel each cylinder can burn with MAXI-BORE™ carbs.

Q6: Now, let's work this backward for comparison. If your ported head, with over sized intake valves, flows 86.4cfm, and your stock 26mm carbs flow 70cfm, with no air cleaners, what amount of air/fuel flows through both, (no MAXI-BORE™ carbs nor flowed 26mm boots), what air flow comparison should you see?
A) 47cfm.
B) 45cfm
C) 41cfm
D) 35cfm
E) 38cfm

Answer: E) 38.73cfm You would gain 22% more air/fuel by having your 26mm carbs and boots MAXI-BORED™.

But, it takes more than the best flowing carbs in the world to make the MAXI-BORE™ package! Something even Mikuni didn't think about when they sold the 29mm Smoothbore as a slip on replacement for OEM 26mm carbs. Buyers installed their new 29s on their engines to find marginal performance improvement and often ran into jetting problems. Why? If your motorcycle came with 26mm carbs, isn't it likely that it also has 26mm carb boots? Absolutely! What happens when you install 29mm Smoothbores on 26mm boots? The limit to top end air flow is still the 26mm boots. Those boots block 20% of the available air/fuel provided by the Smoothbores. The top end limited airflow created by the 26mm boots distorts the fuel delivery curve, making the Smoothbores extremely difficult to jet, the last 20% of the throttle opening does little to increase airflow or power.

So, Mikuni got it wrong!!

Mikuni made another mistake with their 29mm smoothbores. Remember the smoothbore insert that supposedly allowed more air to flow through the carb, than the OEM 26mm carbs. Well, it turns out that the insert actually killed low speed jet signals, reducing low and mid range performance. Some people would call it a flat spot. In our drag strip tests we found that an OEM 28mm carb (Z-1 or Z-1R) actually outperformed the 29s at the drag strip. The 29s flowed more wide open, but the 28s have better low and mid range mixture control, power, and that is what wins races.

The MAXI-BORE™ difference is the complete package:
1) Your 26mm or 28mm Mikuni OEM carbs (Z-1, KZ900, KZ1000, Z-1R, Z-2, GS750, GS850, GS1000) are disassembled,
2) multi angle, multi-process boring operation is performed on all 4 carb bodies,
3) fuel and mixture passages are drilled to allow greater flow,
4) critical bored surfaces are hand machined and sanded for maximum fuel jet signals,

5) passages and ports are flushed and checked for flow,
6) pilot jets are cleaned and checked.
7) Bad gaskets are replaced.
8) Extensive machining is done to allow maximum air flow & improved jet signals (improved performance).
9) Your carb boots are hand air flow ported to match your new 30.5mm MAXI-BORE™ carbs.
10) Throttle linkage is extensively modified to allow the slides to open farther, for your new wide open throttle position.
11) Your carbs are cleaned, tested, assembled, adjusted, and synchronized.
12) Your carbs are pre-jetted, according to the information that you supply (exhaust & intake mods, cams, piston size).
13) Your carbs are then shipped to you. Your carbs, not someone else's carbs. Not eBay carbs. **Your carbs.**

Getting your carbs Maxi-Bored™ is easy. Remove your carbs, drain fuel, remove rubber carb boots, slip boot over carb spikots, bag carb/boots, double box, INSURE shipment, ship to: **M. Campbell POB 8857 Alta Loma, CA 91701**. I can return ship COD, or you can pay by U.S. Post Office Money Order after completion, for Maxi-Bore™ process, necessary replacement parts, shipping and insurance to your door.

NOTE:

We can also bore 29mm Smoothbores to **31mm** & sharpen jet signals for increased low & mid range.

We can also bore 33mm Smoothbores to **38.5mm** & sharpen jet signals for increased low & mid range. These carbs have such good jet signals that they will even work on stock 750cc engines.

Ask about our amazing **"5th Fuel Circuit"** option, allows extra fuel for an even more powerful top end pull. Can be installed on any of the carbs listed above. Contact Monty for info or pricing. info@x-pipe.org