**NEEDED DATA**

***Fuel/Oil Ratio Calculator***

**Air or water cooled? A/W**

**Maximum RPM**

**With power valve? Y/N**

**Engine compression ratio**

**% ethanol in fuel**

**NGK spark plug #**

***Porting Calculator***

**Cylinder bore mm**

**Piston stroke**

**mm above exhaust port**

**mm above transfers**

**deck (mm from piston top edge at TDC to cylinder top)**

**boost port angle (from vertical)**

**boost port depth**

**total width of all transfers added together**

**total boost port width**

**end RPM of powerband**

***Carb Size Calculator***

**Engine cc**

**Cylinder bore**

**Compression ratio**

**Transfer duration**

**Piston port or reed valve? P/R**

**Feet elevation**

**Peak power RPM**

***Crank Balance Calculator***

**See dragonfly75.com/moto/CNinstr.html**

***Squish Calculator***

**Cylinder bore**

**Piston stroke**

**Con rod length**

**Peak power RPM**

**Compression ratio**

**mm above exhaust port**

**mm deck (mm from piston top edge at TDC to cylinder top)**

**fuel octane**

**outer piston/head clearance**

**inner piston/head clearance**

**squish band width**

***Expansion Chamber Calculator***

**mm above exhaust port**

**mm above transfers**

**mm deck (mm from piston top edge at TDC to cylinder top)**

**desired end of powerband RPM**

**has power valve? Y/N**

**has normal CDI w/timing curve? Y/N**

**current header length (from piston)**

**current diffuser length**

**current baffle length**

**current stinger length**

**current header inner diameter**

**cylinder bore**

**piston stroke**

**mm increase of header outer diameter**

**from beginning to end**

**current belly outer diameter**

**current stinger inner diameter**

**current stinger length**

**engine compression ratio (or cranking PSI)**

**single/dual/triple exhaust port? S/D/T**

***Jetting Calculator***

**Carb brand**

**Carb model**

**Carb size**

**Cylinder cc**

**Piston port or reed valve? P/R**

**Transfer duration**

**End of powerband RPM**

**22/210 idle jet #**

**air screw turns out**

**slide cutaway mm**

**needle ID**

**needle jet ID**

**needle shroud height**

**4/042 main jet #**

**N100/604 main jet #**

**Feet elevation riding area**

**Farenheit temperature riding area**

**Relative humidity**

**% ethanol in fuel**

**carb inlet bell diameter at needle air hole**

**idle RPM**

**center slide height mm**

**slide open mm at taper start**

**idle slide height**

**needle jet mm below venture**

**slide bottom to clip base**

**needle clip position (1-5. 1 is highest)**