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DELLORTO CARB SETUP/SYNC PROCEDURE

Our bevel drives can be made to run extremely well with the stock dellorto carbs - especially if the carbs are in tune. If they are not adjusted correctly, your performance will be severely lacking... The information below are the stops I recommend after a carb rebuild or disassembly and cleaning etc; or to set up new carbs. Assuming you rebuilt and setup the carbs correctly [or you are installing a new set of carbs, or I rebuilt your carbs for you] this is what to do to adjust them correctly and easily. Print this out, go to your bike and read this over a few times while you stare at things. Once you understand the bottom line, warm up your bike and go for it.

First off, I disassemble, clean and properly lubricate the throttle assembly and throttle cables. I also make sure that the cable doesn't bind or have any sharp bends between throttle assembly and carbs when I reinstall [smooth bends!!!]. Check your exhaust gaskets [between the heads and the exhaust pipe] to make sure they are good [did you safety wire the nuts in place?]. Also make sure the intake manifold insulators are in good condition [the rubber spacer between head and intake manifold]. You can safely check to see if the intake manifold insulators are sealing well or are leaking by warming up your bike, going outside and spraying just a bit of carb cleaner around the rubber. If they are leaking then your idle will increase for a bit. Once I have checked the insulators and exhaust gaskets AND properly maintained the throttle and cables I turn my attention to the carbs.

WHAT TO DO

- *Back out slide screws so they are not touching the slides
- *seat [turn in] the mixture screw completely [closed] then back it out 1.5 turns for PHF carbs, 2 turns out for PHM carbs
- *loosen throttle cables so there is at least 1/8" freeplay at the adjusters on top of carbs — no freeplay? Remove the locknut from the adjuster and reinstall, use some Teflon tape on the adjuster screws. Plastic top cap carbs just remove them to start with.
- *pull throttle cable to make sure gas squirts out the pump jet on each carb. If it doesn't then you need to prime the carbs. Put your finger over the non-return valve on top of the pump housing and pull the cable until gas squirts. Do the other carb. If you have trouble, remove the non return valve and put 6—10 drops of gas in the hole and reinstall. Try again.
- *warm up bike and hook up vacuum gauges [OK] or mercury tubes [great]
- *adjust slide screws so you have an even idle tickover w/even vacuum readings, don't worry about the rpm at this point, just work to attain the same vacuum readings for each cylinder.
- *twist throttle so tickover goes to 2-2500 RPM or thereabouts and hold her steady [a friend here makes it easy]
- *adjust for even vacuum at this RPM by turning the cable adjusters on top of carb[s] in or out - adjustment starts by backing out whichever adjuster needs to be backed out [on whichever carb] to get constant vacuum between both carbs. Pull a cable to see which one you should start with.
- *check idle vacuum again and re adjust slide screws as necessary. Adjust for proper tickover RPM now, using the slide screws only.
- *adj cables so each has just a bit of freeplay, check 2500 PRM vacuum reading w/gauges again and readjust at the cable adjusters as req'd—this is a VERY important step. You MUST have a bit of free play in the cables!
- *start playing with mixture screw for max idle [in = leaner or less gas]. I listen for sound change, and use my fingers over the muffler end to feel for a stronger exhaust pulse while I turn the mixture screw on that cylinder's carb.

I go back and forth between the carbs sometimes several times making little adjustments, always listening for high tickover and feeling for a stronger exhaust pulse. A dull BUH BUH BUH sound indicates you can make it better still. Keep adjusting until you hear and feel a louder and more authoritative BAHP! BAHP! BAHP!

WHAT IT MEANS

Adjusting the cables is an integral part of carbie sync and vise versa. Start at the top of this list, go through it then repeat a couple or 4 times as necessary..... You will get the hang of it soon enough and you will be surprised at how well your bike runs after this important step in the tune up game. You are making sure the slides are being pulled evenly causing equal vacuum through each carb from idle all the way through the range.

I also recommend that you pitch a single cable throttle - you know, the kind that has one cable going to a splitter then 2 cables one going to each carb in favor of a Tommaselli Daytona 2C throttle or the like. The DAYTONA throttle has some key adjustments - you can play with the throttle stop on it so that max pull doesn't pull the slides up against the top cap..... that will start ruining things for sure. Some of the stock throttles didn't have a stop so you would pull the slides up against the top cap and stretch the cables and wear the throttle assy, slides, etc etc.. The DAYTONA throttle also has a friction device so that you can give her partial throttle and tighten it up for a higher tickover during warmup.

Speaking of warmup..... make sure you do so. Running your bevel drive under load when cold will kill the bottom end. Blip the throttle until you feel some heat on the case on that first startup of the day then go ride taking it easy for a bit.

