SOLEX OZ

November 2007 Newsletter.

Summer has arrived and what better time to enjoy the pleasure of a ride on the Solex. Not only is it the second best fun you can have, but we can be smug in the fact that we are, in some small way contributing less to global warming, traffic gridlock, and saving a bundle on insurance, registration, and depreciation. I have been lucky enough to be able to ride my Solex to work almost every day this year. Passing stationary traffic and riding on tracks over bridges watching frustrated motorists, what more could you want. Also living reasonably close to the city, I find I can travel into town, park on footpaths and be back home in much less time than I ever could in the car and have ball as well.

RECENT HAPPENINGS

November has been a good month for finding Solexes. Ern M. has acquired a Plisolex from Cambletown NSW. In extremely good and original condition, these rare (only 2500 produced) and interesting bikes are very thin on the ground, in fact we only know of three in Australia, one other being Don D.
Eurobrit in Greensborough had sold this Pli some years ago to NSW and now it is back in Victoria.
Andrew McD. had a great week, winning a 3800 on eBay and driving over to South Australia to pick it up, then only a couple of days latter finding another 3800 at the Bendigo Swap meet, this being are rare Dutch 3800 and will be a twin for Ted C's Dutch 3800. The SA bike was checked over and then used on our Summer Run only a few days latter (see report) and went like the proverbial. The moral of this story is that there are Solexes out there to be found, so keep searching.

SUMMER RUN

Our "welcome to summer" run took place on Sunday the 18th of November, Peter H. organized a great route starting at Burnley and following the Yarra Trail along the river and ending in Clifton Hill. We then went to Andrew McD's storehouse of veteran and vintage cars and bikes and were treated to a guided tour of this fascinating collection.
Francis supplied a great morning tea. Our thanks to Peter, Andrew and Francis for a really top day. Although a bit rainy at the start, the sound of Solex motors buzzing along the banks of the Yarra was something not to be missed.
Latter in the morning much testing and adjusting of Ern's new variable carby jets was carried out up and down the hill outside Andrew's. A photo of the Solex line up outside Andrew's storehouse can be found on page one.

TECHNICAL TALK

A common question asked about Solexes is why some models go faster and climb hills much better than others considering they all have the same size motor.
The early models, up to and including the 1700 were generally slower to reach maximum speed and ran out puff very quickly on hills. These models normally produced there maximum torque/power (.5 to.7 hp) at an engine speed of 3000 rpm.
This was deliberate safety margin engineered into the design to limit speed. A 2 stroke motor performs best when the volume of air/fuel is increased in the chamber. By limiting the size of the admission port to 7mm and having part of the piston covering the port by 2mm at its end of stroke, Solex were able to limit power. If the engine was not getting up to 3000rpm it was always going to be slow. With successive models the port was enlarged and altered in shape progressively to 8.5mm in the 3800 motor, and max torque/ power of .795hp was achieved at 2500rpm. More torque at a lower speed meant much improved acceleration and climbing speed.
The cylinder head and piston do not have any major influence but the cylinder barrel and its porting are the key to improved power and speed. The ultimate barrel is designated TUM 80A cm 6.5. and is cast into the lower face of the casting. In theory if you graft this improved barrel onto an early engine you should be able to improve the performance of the earlier models. After discussing all of the above with Ern M, he has decided to experiment with such an option. We will keep you informed of his progress.
Another problem encounted with the Solex motor is the limitation of the fixed jet in the carburetor. The 28cc jet is designed to supply the correct amount of fuel over a set rpm range. At speed outside this range, i.e. idling or above 3000 rpm the engine suffers from an over rich mixture and a rough idle or dieseling at high speed which is normally un-avoidable. A variable jet will overcome this problem particularly at high rpm when dieseling limits power and hence higher speed.

By leaning the mixture, the motor will produce more power and hence, more speed. Ern has produced a batch variable jets beautifully turned up in brass and silver steel to screw into the jet orifice. And a substantial increase in power and speed is gained. Call Ern via our website to discuss the availability.

I am about to produce a register of Solexes in our group and would appreciate if you could email me engine numbers and frame numbers if you can find them.

Coming up

To round off our first year, an informal run is planned for Sunday the 16th of December.
An 8.30am start at Scott's, South Melbourne, then off down the Port Melbourne bike track and along the bay to Elwood, a visit to the antique cycle shop in Grey Street St.Kilda and back via Albert Park Lake with a Coffee en route. Then back to Scott's for bike fiddle/tune etc.
The Antique Cycle shop is a fascinating place with many old style accessories for sale.

I hope the first year of our Solex group has been enjoyable to everyone, I personally have enjoyed the camaraderie. The Velosolex, although simple and basic gives me a huge blast every time I ride one. Thanks for your support!
Keep on Buzzing, Geoff.