## 1910 Flanders – Engine Rebuild

Here's the next edition of Steve's Flanders restoration. And we get a video of it running! Thanks, Steve--keep them coming!

When I arrived home with the Flanders, I was keen to make sure the engine would run, at least long enough to make sure there were no serious knocks or cracks evident. A few valves were stuck open so it would only run very briefly, but just enough to convince me the block wasn't cracked. After freeing up the valves I was able to run it longer and found it was a real oil burner, or perhaps 'oil pumper' would be more accurate. Oil was actually blowing out of the muffler. (see photo) After disassembly, I discovered the oil rings had been replaced with some unknown modern types. Egge Pistons was able to supply me with an "off the shelf" piston set from a 1925 to 1932 Chrysler that had the critical dimensions I needed. My machinist simply had to adapt the original rods and bore the block to suit the pistons.

Most of the 104 connecting rod shims (yes that's the number from the parts book) were still in place. One shim was removed from each rod to give me a plastigauge measurement of about .0015.

The pistons were installed and the block lowered onto the crankcase. This engine's crankcase has no oil pan but instead has small hand holes under each connecting rod. This makes lining up each rod to each throw more difficult and inserting cotter pins needed lots of patience as well as extra long needlenose pliers!

Mike Butters' casting expertise was called upon to cast a new water pump in aluminum, replacing the original damaged pot metal one.

The engine couldn't be started until I replaced the leather gasket in the carburetor's auxiliary air valve. It seems to run well now.









