

Re-boring a Silk

After having new rings fitted to my Silk I found you could look down the bore, past the rings fore and aft. So, we investigated the options. We found the only answer was to have special new liners made and new Silk pistons. The cost and, particularly, time involved for new liners and pistons was prohibitive. It appears Silk never made over size pistons.

We then thought; why not use Roger Moss pistons? The tops of Scott and Silk pistons are virtually identical above the gudgeon pin. We enlisted Eddie Shermer's help, and he bored the barrels the absolute minimum needed to clean up the bores, and turned new pistons to fit.

Now the fun started! We put the barrels on the new pistons and turned the engine over....with a resounding clunk the piston skirts hit the top of the crankcase! We had discovered that Silks, being virtually handmade, had different length pistons from one engine to another. So, this is what we did... you measure from the bottom of the gudgeon pin hole to the bottom of the piston skirt on your old Silk pistons and use this measurement to machine your new pistons to the exact same dimensions, this gives a base line from the bottom of the skirt to mark the top and bottom limits of the ports in the piston by transferring the measurements from your old pistons. Then put the pistons and barrels back on the engine and line up your marks with the ports in the barrels, then with a scribe through the barrel ports mark the side limits of the ports on the pistons. Mount in a mill and cut out your piston ports to the exact dimensions. This gives an exact match of pistons to ports for maximum gas flow, with no masking. We balanced the pistons to within 1/2 gram by removing metal from inside the skirts and, although heavier than Silk pistons there did not appear to be an increase in vibration when running, and the engine runs beautifully.

The next problem was the cylinder head to barrel joint. There are now only solid copper gaskets available, as the composite gaskets are no longer made. The problem is that Silk heads appear to have been made of very soft alloy and the head at some time in the past has had the recommended skim to increase compression. The tightening down of the head on to composite gaskets, over the course of forty-odd years, has caused depressions in the head surface. As we did not want to have the head skimmed again and make the problem worse in the future, this is what we did. After cleaning the head thoroughly we skimmed the depressions with 24-hour epoxy metal and struck off with a straight edge. Once the epoxy had fully cured, a few seconds on a surface plate with a sheet of fine emery ensured a perfectly flat head. To get a perfect seal with no leaks, you should thoroughly anneal your new copper gasket and assemble with Three Bond 1184 non-setting epoxy liquid gasket. If anyone has any questions, give me a ring on 01304 372651. *Peter Reason*

Radiator Update

I would be rattling at radiators if the tubes I had ordered last October had arrived. There is always a long lead time, around four months, and they are made to order but the virus seems to have hit just as they would have been made in Germany so they are delayed. As I have now run out of materials, work on radiators has been halted until they arrive.

Graham Moag