

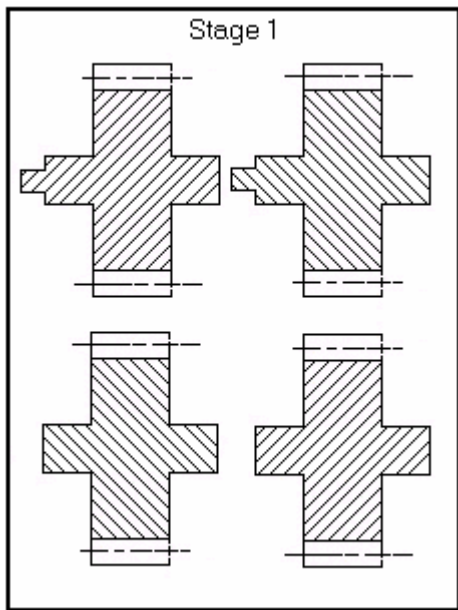
Fred's double dutch oil pump

Here is a drawing of a enlarged oil return-pump, made up from two feed-pump's. This enables you to install your "standard" oil return-pump as feed-pump, this setup will increase the oil circulation by about 1/3!!

In my case this cured the problems I had with the left-hand cylinder, that kept seizing. Oil is not only a lubricant, it is also a coolant.

So by increasing the oil-flow you will also transport more "heat" out of your engine.

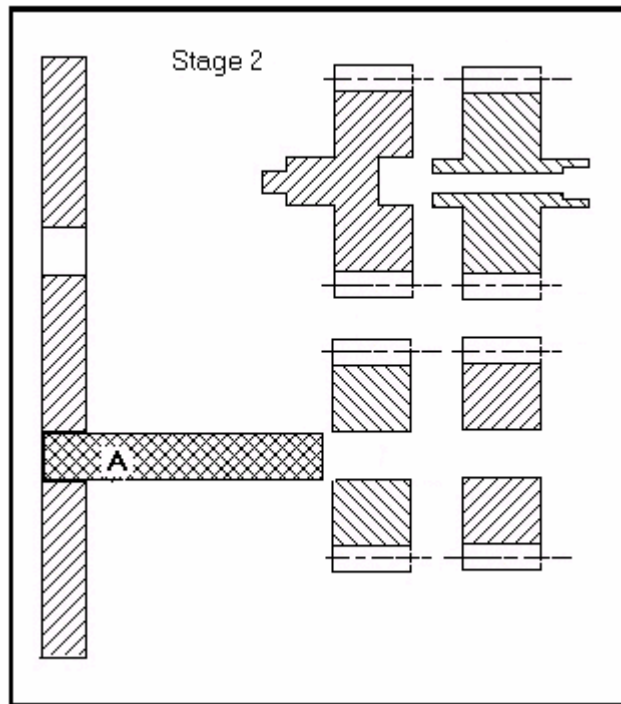
A pump made in this way will fit behind a AJS cover, at a Matchless you must chamfer the side a bit more, and take a small amount of material out of the cover.



Stage 1: Find your self a extra feeding-pump in reasonable condition.

And take the feeding-pump from the engine.

Before you start !!! Look fore the wear-patron on the gears, the gears **must** be put together running in there original direction.

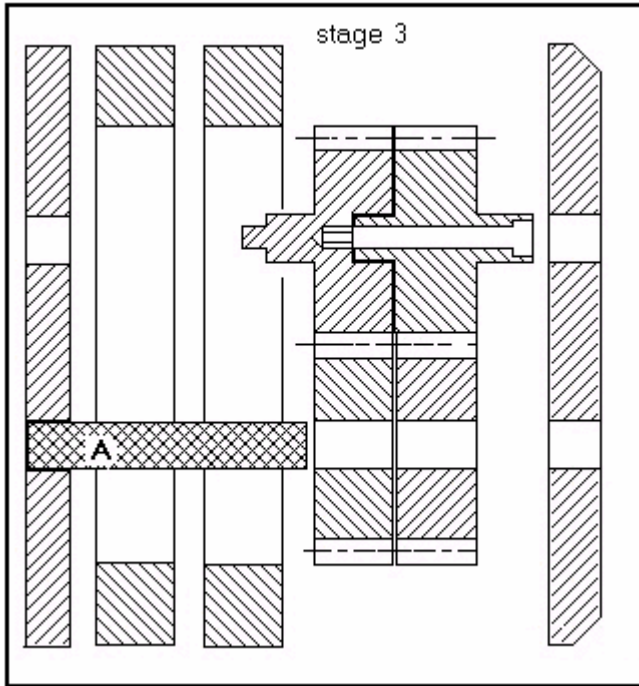


Stage 2: Make the axle (A) (steel or bronze) for the two free running gears, and give it a tight fit in the bottom plate of the pump.

Then make the holes in the gears, so they can run freely over the axle, without any play.

The drive gears are put together by giving them a tight fit, (and safety first) loctite, and a 5 mm allen bold.(with a small head.)

Make sure that on the final assembly the teeth are exactly in line.



Stage 3: Assemble the pump and test it by hand, when it is running a bit tight look for high spots in the pump housing, or on the gears and remove them with a fine emery paper. It can also be the end play on the gears, I use 0,03 mm.

Repeat this process until it is turning freely.

One last note: Don't use hollow locating-pins when assembling the pumphousing, they are located over the oil-ways in the mounting plate!!

Well I hope this will help to save a lot of twins from there oil starvation.

If there are still questions after reading this article, don't hesitate to place a message on the forum.

Fred