

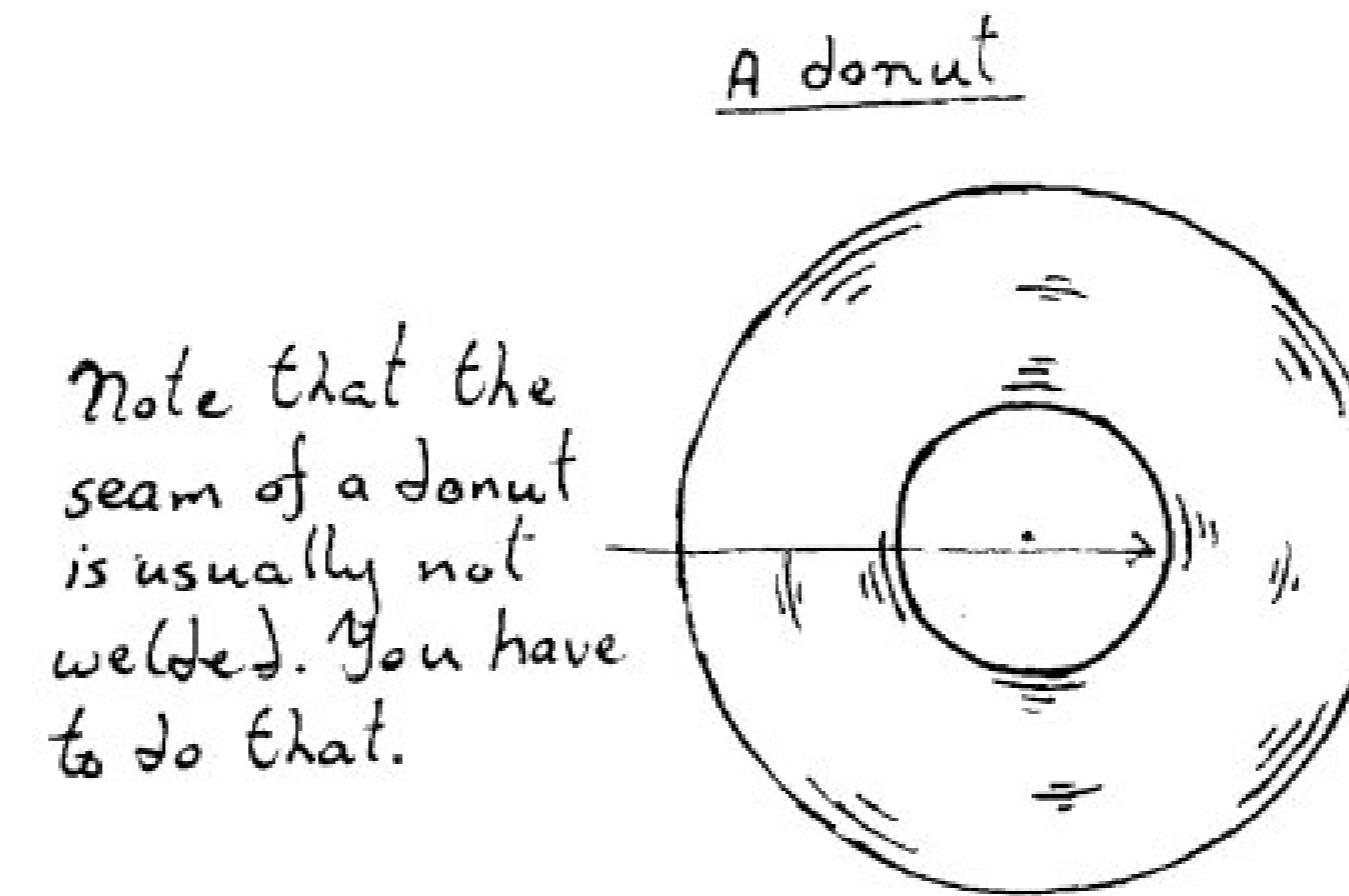
By Glen Morgan Part 2

THE HEADERS (also called the "lead-in" pipes)

In my experience, you can waste good money getting muffler shops to bend up header pipes for you. Unless they have a mandrel bender, the pipes will vary in section. Pressure waves don't like variations in section, and pressure waves are mainly what tuned exhaust systems are about!

There are still some real tradesmen around who can produce sand bends that look like a pretzel without mucking up the cross section of the pipe. These people are often in retirement and just tickled pink to help a young fella out, if you can find them.

I suggest that you use "donuts" and pieces of strait pipe of the same section to create your T500 header pipes. A donut is a continuous circle of pipe which comes in various diameters and bend radii. They are available from muffler shops and they solve a lot of problems that beset me when I first started tinkering with exhaust systems.



The muffler shop person may not know the internal diameter of a pipe or donut. They generally work in external measurements.

Original header pipes are 1.75 inches internal diameter.

**If you don't have calipers for measuring, take a header pipe into the muffler shop with you and match it up to the ends of their pipe stock until you get a close external match (better slightly bigger than slightly smaller).

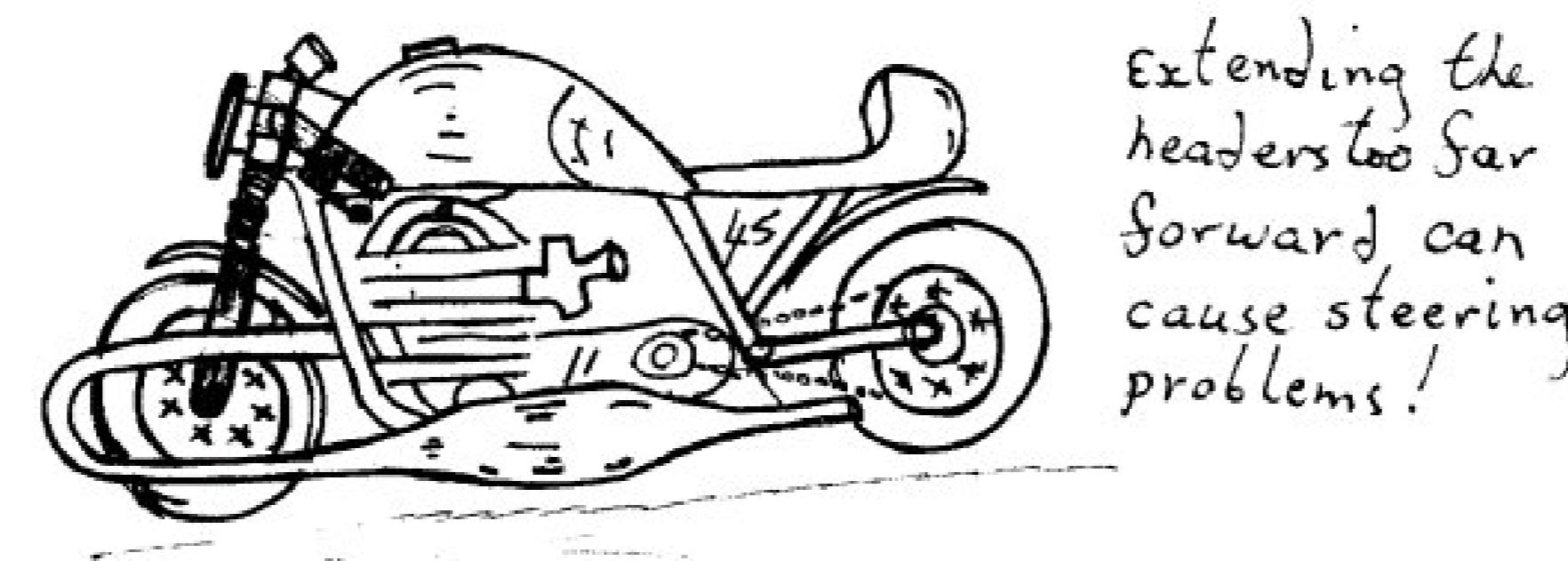
**Next compare the wall thickness. If you don't have anything to measure it with, just eyeball it. If your "eyometer" can't detect much difference, it won't be significant for what you are doing.

**Now order a donut with the same external diameter. (donuts can be quite expensive in this country - about \$45, unless people are kind and give you a trade discount) You should only need one donut to make two T500 pipes. ["TTCO" - think twice, cut once]

Choosing the radius can boggle the mind a bit, but I wouldn't get too worried about this. Muffler shops that carry a range of donuts in stock will usually exchange them for a different size (if you haven't started hacking into them).

** Take the donut home and hold it up by the exhaust port. You will be able to see whether the radius is going to work out pretty easily. Basically you need to be able to clear the down tubes of the frame as you cross over them toward the centreline.

When planning your headers, you also need to make sure that you don't take them so far forward that you are in danger of touching the front wheel or mudguard (fender if you speak American).



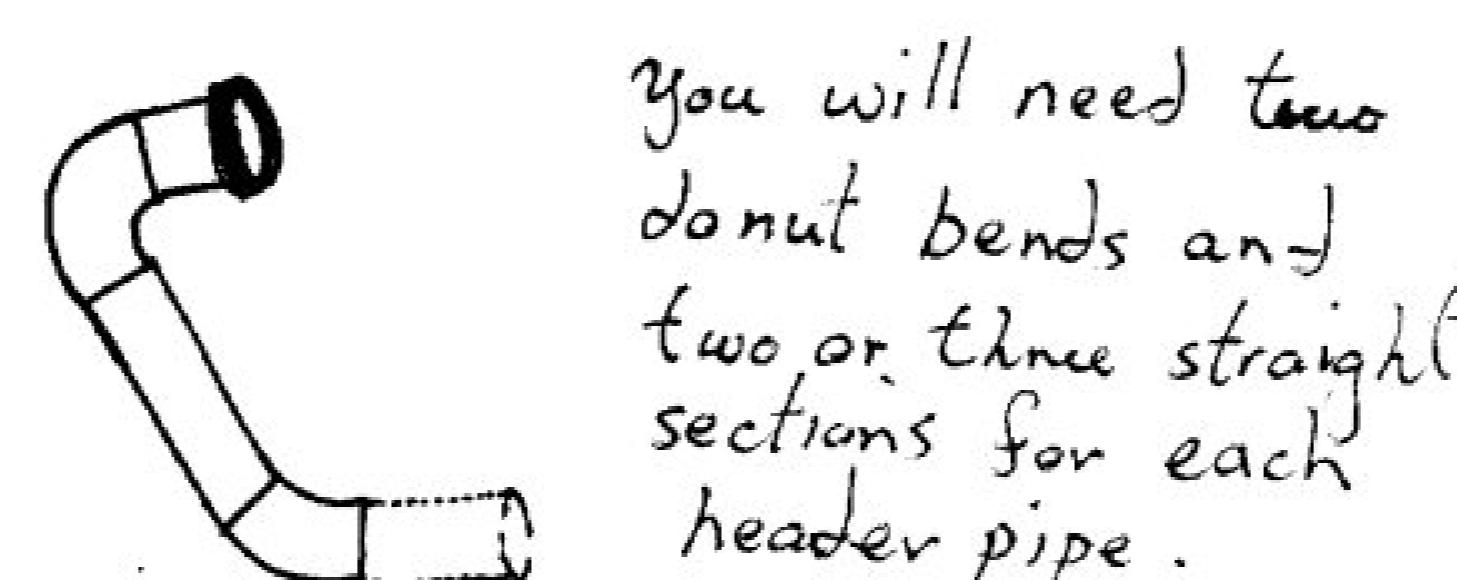
Remember that the wheel moves back toward the frame when the front suspension is in compression and that braking forces can further deflect the wheel toward the frame.

This is particularly important if you have gone the whole hog, and steepened the steering head angle to induce quicker steering.

I am assuming that you are going to stick with the original finned clamps to attach your headers, but if you decide to go the slipper joint way, have a look around for larger capacity PE or RM Suzuki exhaust flanges with slipper joints. I have an assortment of these motors in my storage shed and some of the slipper joints are just the right size to adapt.

Now comes a slight moral dilemma (for me anyhow). I make my own flange where the header enters the exhaust port because I don't like cutting up original headers that some restorer of T500s may need. I suggest that you be not so fastidious. You can hacksaw this bit off and use it. (But not yet! "TTCO!")

So, you are going to need this bit with the flange on it, possibly a bit of straight pipe, then a donut bend, then probably a bit of straight pipe, then a donut bend and possibly another bit of straight pipe.



BUT AT THIS STAGE DON'T CUT ANYTHING ("TTCO!"). Leave the headers for now!