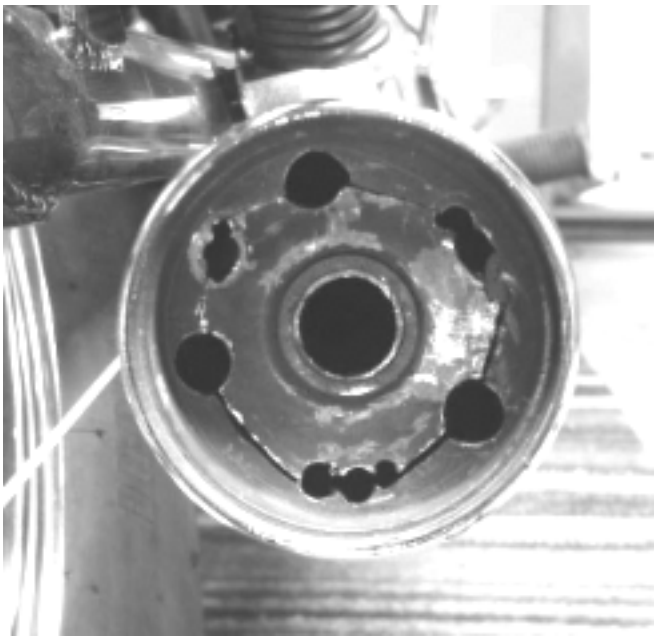
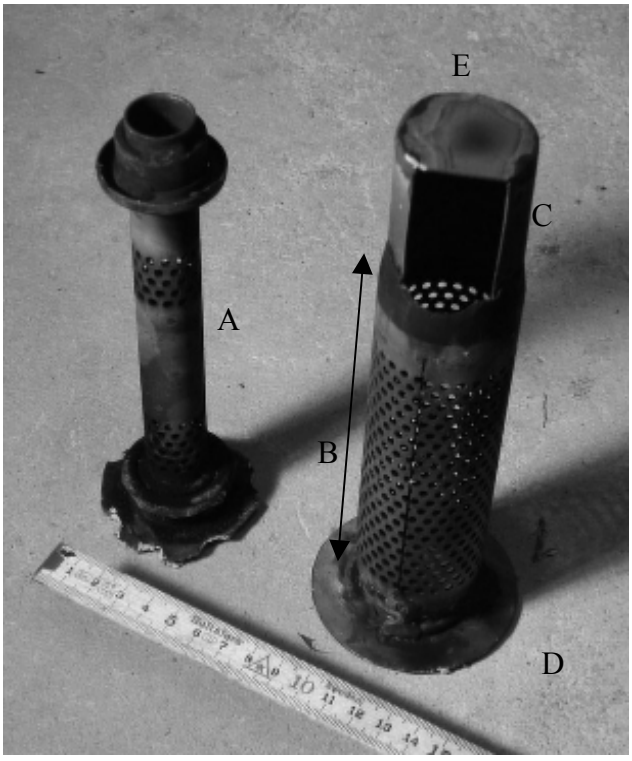
The Hartman modification to Savage muffler a la Mark K

Original Suzuki Savage exhaust. Four pop-rivets and two weld spots. The inner perforated pipe A can be seen in the centre. The outer perforated pipe B is 1 ¾ inch in diameter so make the cut where the rivets are.
I did the whole modfication with the muffler in place an it took like three effective hours.



Drilled and cut with a hacksaw blade. Can be cut out with an oxy-torch as well. Just make sure that the cut is all way around. Use pliers and tuck and turn the inner part free. Just pull it right back in the mufflers axis. Use a vacuum cleaner an suck all metal shavings from the muffler end.



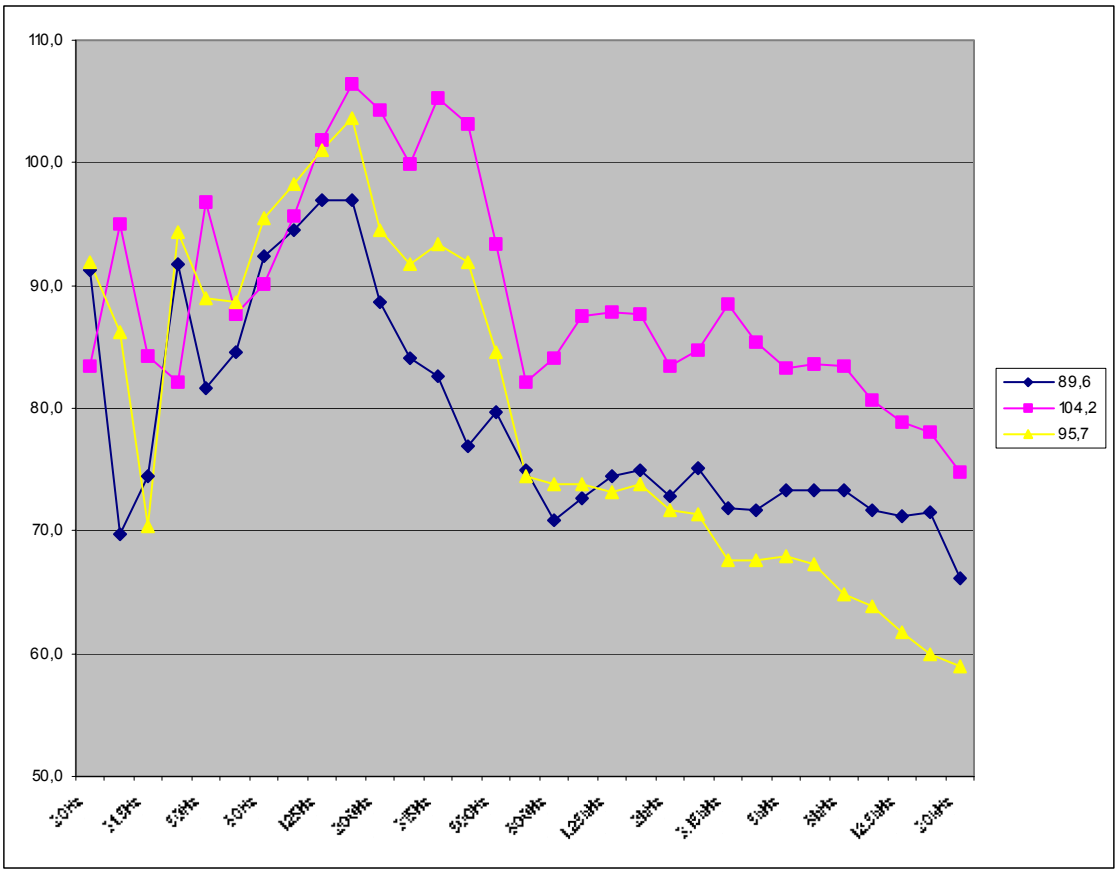
Part A is the centre of the pulled out assembly. Part B is over the A spot welded at the ends. Cut these with a grinder and use the B part. To get a snug fit do not distort the diameter of B, spot-weld it before cutting it loose. Weld 1mm plate 15 mm long at one end and 55 mm long not fully closed (leave 30 mm opening), at the other end. Weld an end plate E to the C part and O-plate at the D-part. O-plate outer-diameter same as inner-diameter at the end of the muffler. Mine fits so well I just tap it in place with a rubber mallet. The opening of the C shall point upwards.

The last muffler with endplate from another angle. Unpainted. Paint with high temp black colour.

Stuff in the glass fibre wool in rolled shape, help it in place and when you are installing the end for the first time “screw” it in to spread the wool not pushing it to front. The holes are tiny so I used domestic house insulation wool with good results.

Special thanks to Peter Hedman, Finland, for support and encouragement.

Looking good and sounding NICE!



Since I work with acoustics I measured the sound levels according to a Swedish code. The blue curve is the OEM muffler. (Tame). Pink is the level when gutted i.e. the A and B part removed. (Sharp and awful exceeding the code limits) Yellow is the one after the modification, lower in the high frequencies, higher in the low! Perfect! Weighted total went from 89,6 dB(A) to 95,7 dB(A) i.e. quadrupling the experience!
Good luck if you do decide to do it! /mark k