Alfa 33/Sud/Sprint Hub Seal replacement

A lot of times these seals are overlooked and they really should be replaced as they are getting to 30 years old if they are the original ones. And when they leak the oil spins off of the hub all under the engine bay....messy!

A couple of years back I paid a mechanic to replace the seals on my Sud race car and it cost \$80 for this. Now my 16v needs it and I thought I would get one made so I can change them myself.

The hubs can be removed quite easily with the Engine and Gearbox still in place, and the tool can be made with some steel tubing high tensile threaded rod with the aid of a Mig welder and a lathe.



Hub is placed in a bench vice to hold it in place



 Here you can see the thread which was cut on the tube to screw on to the locking ring and the machined threaded rod to press on to the end of the mini axle



- Grease or oil all of the threads and the tip of the shaft as this tool does have to work quite hard. Once the tube is threaded all the way down to the bearing the bolt can be inserted. Once it reaches the axle it will become quite tight, this is normal as the ring is being removed. Wind it in until it becomes loose.



Here you can see the threaded lock ring and the phonic wheel that comes off too. The phonic wheel is used for the speedometer signal for the Alfa 33s, where as for the Sud's and Sprints you would have a worm drive for the cable speedometer.



Once the rings are removed you will need to push out the axle from the carrier. This can be done using a press or a jaw puller. As this does not require much force it can be clamped on the alloy carrier (a 2 jaw puller would be preferable here)



Once apart you can pry out the old seal making sure to not damage the mating surface.
Then the new seal can be pushed in with some oil / grease on the lip to make reassembly easier and prevent rolling of the seal



- A piece of steel tube is used to push the axle back in to the carrier (be very careful here not to roll the seal) Take it slowly checking it as it goes down.



- As the lock rings are a tight fit it is a good idea to heat up the ring and cool down the shaft before re assembly. This way they will press on a lot easier



One less leak to worry about =)

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