

# Repair – Hub SIP screws

## SIP STUD PROBLEM

Whats the best tubeless Lambretta wheel rim on the market? In my opinion it's the SIP rims. Why? They have the deepest 'well' the 'well' is the center part on the inside of the wheel, this is very important to aid fitting tyres. Comparing the SIP rims to AF or the Vietnam versions this 'well' is much deeper and you need a deep 'well' to hook a tyre inside and pop it over the rim to fit a tyre and the SIP rims are definitely the easiest rims to fit tyres to, not only that but they are the easiest to remove old tyres. The Lambretta wheel design is totally against us, it's totally wrong, so tubeless designs as with lots of Lambretta ideas have to be a compromise. If the hub screws were 5mm closer either side it would make all the difference!

But without a new designed rear hub and wheel rim we are all still going to struggle fitting tyres. BUT the big down side with the SIP rims is it's design to make the bigger well. They have looked out of the box and found a way to make a bigger 'well' and for that I'm very proud of them finding 'the way' BUT to get the 'well' you need extended wheel screws which non of the other rims require. Sounds ok just swap some wheel screws, but in reality getting old screws out of the hubs that have been there for up to 50 years can be near impossible! And then add to it the Lambretta screws only have a small flat 12mm head to it, which we all know even with a perfect socket they usually round off. Heat helps but this burns your nice paint or chrome and you need to re do it. There are a few tricks, double nutting the threaded end sometimes helps, gripping the threaded end in a vice can get them loose, gripping with mole grips helps. Sometimes welding a nut on the head can free off the tight grip of the alloy and oxidisation that occurs on the steel threads. It doesn't help that Innocenti went and used really fine threads which is a no no in alloy. If your lucky you can use some brute force and a bit of penetration fluid and the studs will come out. If your not lucky what can you do?

You could buy a new hub which isn't practical for most of you or you can give it to someone who knows what he's doing and he can bugger your hub up for you! This is one job I don't like doing, you try all the known methods only to realise your wasting your time and some major action is required! This is the only way I'm finding how to get the old studs out. I cut off the threads back to the hub and cut down the head to expose the steel against the alloy ready to drill. That sounds quiet easy but then the studs are hardened so you have to start small and work up hoping you don't drill off center and you have to re sharpen the drills. If you do go off center you have to re drill the next size pushing it back in line. And you aim to cut out the old screws to a point where you don't break into the hubs alloy. Here I use my fine tuning cutters to cut 3-4 areas to loosen the steel and then small pieces can be chipped out revealing what's left of the alloy threads which need chasing out with a special left hand threaded tap. This job takes around 1 hour when you know what you are doing with the right tools. It's a pain in the arse job I really don't like doing but people keep bringing these hubs in to have the

screws removed. The screws that SIP supply with the wheel rims are stainless steel, but we didn't like the look of them so we made them in high tensile steel as a replace and we sell our rims with our MB extended screws. The other complaint is the early SIP nuts go rusty straight away so we've gone and made these in stainless steel to finish off the whole job.

Is it worth it? Yes we think so, it's got to be the way forward to fit tubeless rims if you want to go down this route.



Mark Broadhurst email [mark@mbscooters.co.uk](mailto:mark@mbscooters.co.uk)