

Tuning work – MB Inlet, 25mm flowed

TUNING 25mm MATCH

Here we have a RT cylinder where the customer has supplied a second hand MB 25mm Dellorto inlet manifold for matching to a new RT cylinder. The shape of the manifold has been dictated by getting a carb to fit into the space to fit with the air filter box and elbow. These manifolds are now 20 years old, the first manifold I did for these was in 1988 for my own bike in my Series 1.

The 25mm Dellorto carb or the Mikuni 24mm TM are not the best carbs to make a bike faster, they are fine as a upgraded version over a 22mm carb and 10 times better than the crap Jetex/Spaco carbs. But they are limited in how the carb works, the beauty of them is they are modern carbs and are fully adjustable to set up any engine and parts are easily available. But why don't they work so well?

In the 90's I did a Honda 205 stage with 34mm, it flew and did thousands of miles and the customer loved it. In the end as people do the customer wanted to down size the carb and make his bike more of a standard looking bike, these were the times of restorations and as it was a genuine SX200 who was I to argue! But with the 25mm he kept complaining it wasn't as quick. In the end I invited him and his wife to come and stay over, have a meal and drink out and give us time to find out the problem! To start with we refitted the 34mm and the speed was straight back, ok the 25mm went back on and it was definitely slower, much slower, jetting was perfect but lacked speed.

We did the usual drilling the air box and modifying the air scoop, which only slightly improved it. Now if you think about it the engines got a hard life trying to get air into it through the air scoop then a 90 degree bend into the air filter box, around the filter and another 90 degree bend into the filter elbow, down the restrictive bellows and around another 90 degree bend into the carb then another 90 degree bend into the inlet port. It's a hard life to suck air and fuel mix through these bends which are basically restrictors. Today modern tuners are using 'sims' 'computer aided simulations' to get more power from the Scooter engine. I'm one to try, ride, take note, learn and move forward. That's how I know what I know, been there done it and tried everything. These computer programs will teach you to tune in a different way. A tuner can play on a computer to get results without even riding a Scooter and get to know all the tricks which make them rideable! I've got this same computer package, to be honest I've never bothered using it. What they do is teach you about tuning using tubes, lengths and sizes and shapes and getting air fuel into the engine and get from the start to finish talking to it's self.

Back to the Honda 205, I turned a down draft Amal 26mm inlet to suit the Dellorto and fitted it with no filter. Guess what? Even though it was still a 25mm the power came back, showing the really old solid mounted down draft 30mm Dellorto inlet was right, back in the late 70's as it put air fuel straight into the crankcase with very little bends into engine! But the

customer wanted the engine to look standard so it all went back the the 25mm MB Dellorto carb conversion through the standard air filter box with the restrictions that came with it. It was better than it came in but still about 20 mph slower!

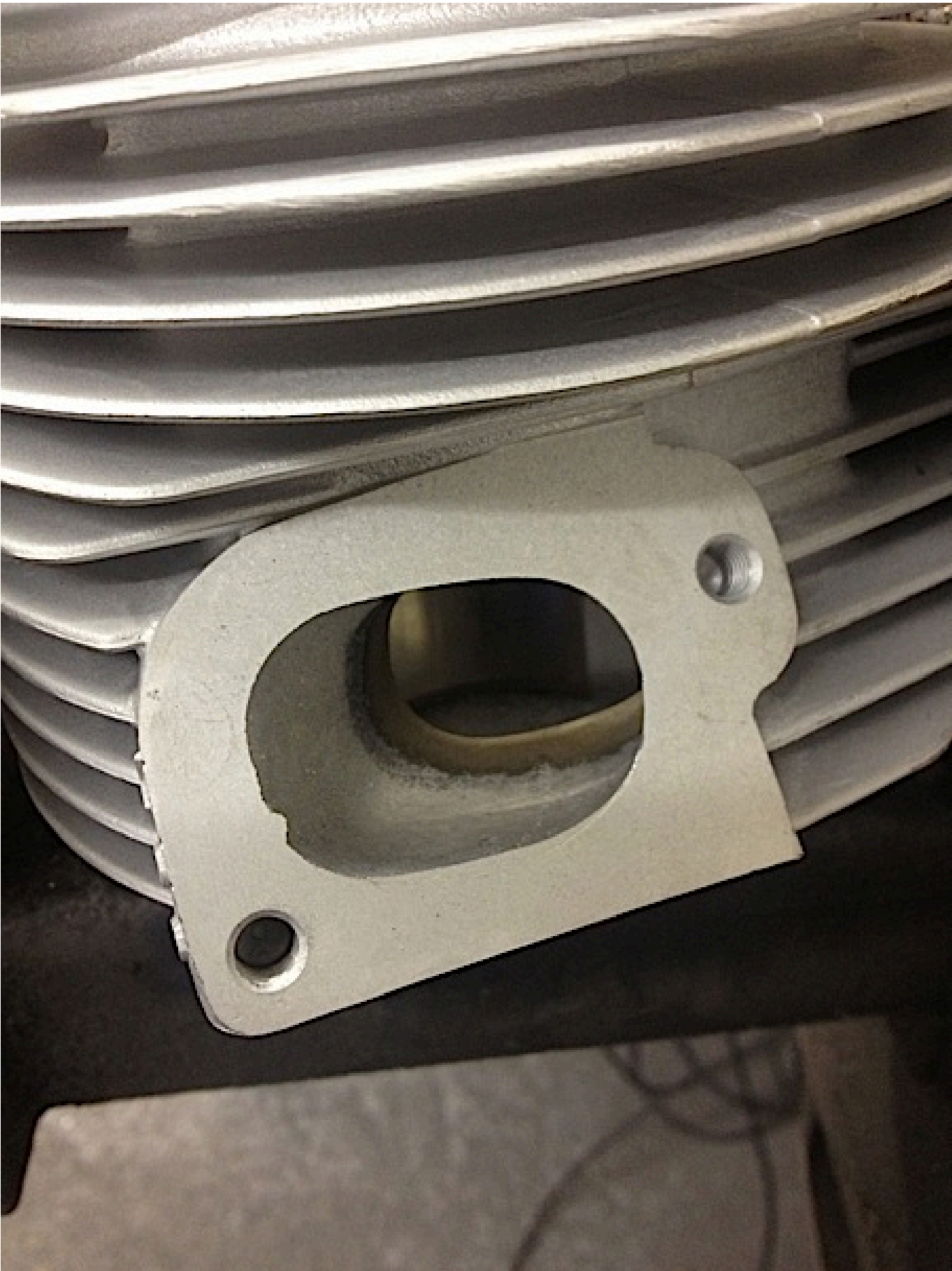
This is Scooter tuning sometimes it's always a compromise on what you can do with the restrictions in place.

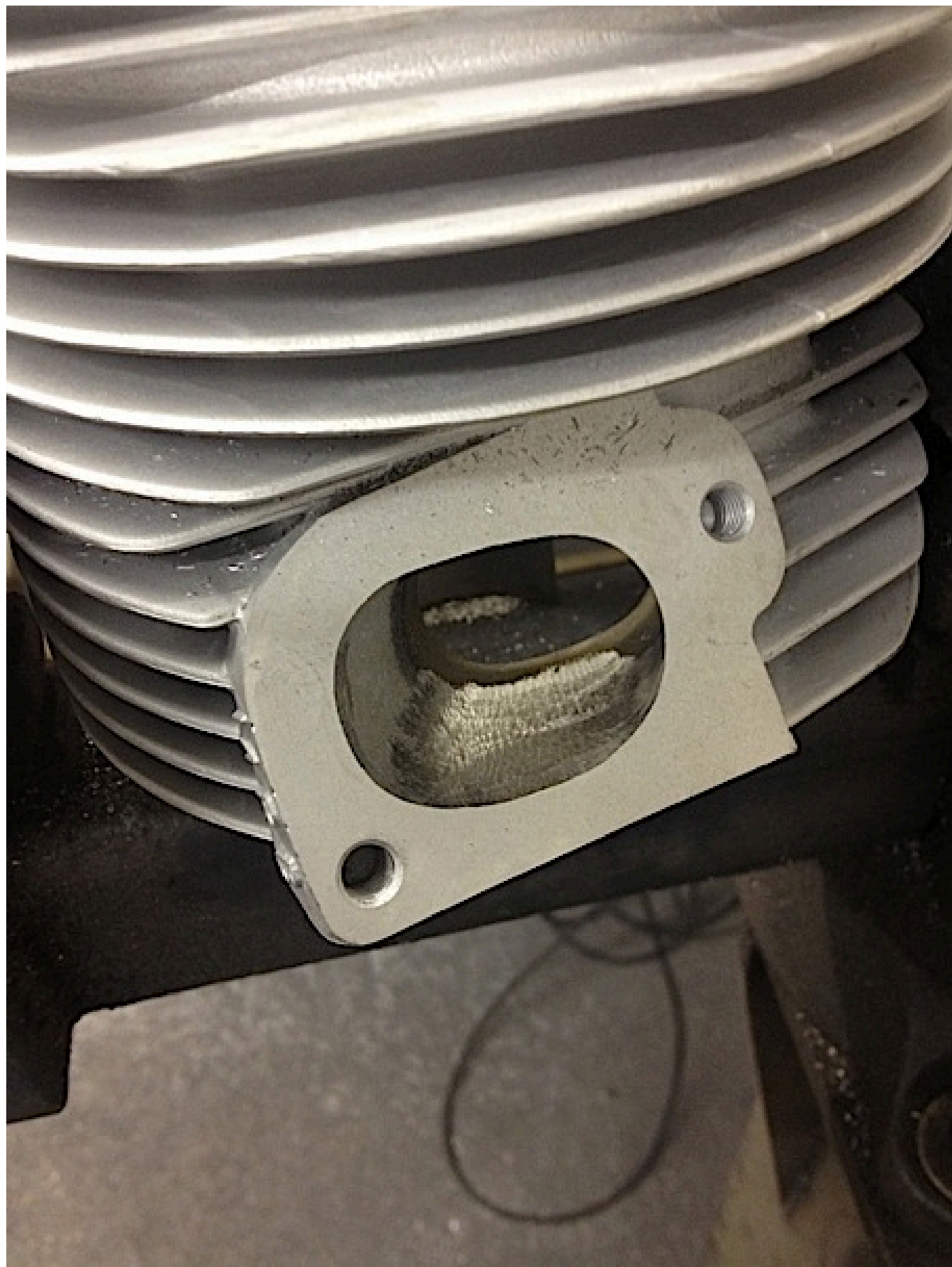
So back to this RT kit, the MB Dellorto inlet shape as explained doesn't help power because it's basically got a 90 degree bend in it. This doesn't help tuning it, unlike the 28/30mm and the reed manifold where you can tune and grind from the outside – in. Matching this manifold is just like matching a standard manifold. You have to fit studs, slide down the inlet manifold and scribe both the manifold and inlet port from the inside of the inlet port. Then grind to the scribe marks, offer up the inlet manifold again and re check and scribe again. Then it's a case of lightly grind each face until they have no steps between each other. When there is no steps it's a case polish and flow the grinding mark in the inlet manifold and inlet port to improve the flow. Then I don't use the inlet gasket I always silicone sealer and smear the joints to make them smooth. This job is always worth doing this to make the kits do what they can do..... and that's impress!



















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