my local auto-factors for about £20. Novas have drums at the rear so ask for front discs or you'll confuse the kid at the counter! Reliant hubs are square so you'll have to grind a 1/8" or so off each corner so they'll drop snugly into the back of the disc centre. At this point you'll discover the locating hole in the middle of the new disc is slightly smaller than the raised centre of the hub.

Two choices: Put the disc on a lathe and open out the holes to suit, or turn down the shoulders on the hubs. I went for the hub option 'cos my mates lathe wasn't big enough to take the disc and the hub was a softer metal. Two minutes with Mr Lathe - job done. NOTE! Do this BEFORE you fit new wheel studs! So now you've got new discs, you need something to stop them with.

Cut two identical plates from 6mm steel, using the template shown. These simply bolt to the flanges on the end of the axle tubes in place of the original drum back plates. The flat edge lines up with the flat on the axle flange (fairly obvious] and angles the plates back and upwards at about 45degrees. Then simply bolt the calliper carriers to the carriers.

I used VW Golf callipers and carrier brackets 'cos they have a built in hand brake mechanism. The single piston is mounted on a screw thread. Brake pedal pressure pushes the whole assembly against the pads, while the handbrake pulls an arm on the back of the caliper,



screwing the piston inwards, providing a separate mechanical handbrake system as regulations require. I bought two second hand callipers, but then discovered they'd seized, so traded them in for re-con units at around £90, I always seem to take the expensive route! Should be plenty of decent callipers in local scrapyards though? And that's it. Simple as that, no alterations to the axle so it can be done in situ. I changed the studs because I've got big rear wheels, but its not strictly necessary. The discs centre themselves on the raised shoulder in the middle of the hub, not the bolts. Overall clearance needed for disc and calliper is roughly 11" so they should fit snugly inside a 13" wheel (mine are 15" with 50 profile tyres) I've actually switched the callipers

over from left to right to make the routing of the hand brake cable tidier. The carriers bolt on to the front of the axle plates by the way, ensuring the pads line up nicely over the discs. The whole set up is plumbed into a standard Reliant Girling master cylinder and seems to work fine on my own trike, I've got a single Z50 Superdream front disc and calliper also running off the same cylinder, giving me all three brakes on one pedal.

There is no balancing valve of any sort and the system seems pretty well balanced front and back (It is always good practise to test your brakes for front wheel locking, before hitting the road. If locking occurs, bias value should be fitted. As in Andy's case its fine without, but in some cases weight

distribution if heavy on the rear can cause locking on the front....
100%Biker)

The handbrake cable is a shortened version of a standard Golf one because it has a locating shoulder on one end that sits in a lug cast onto the calliper body. My cable cost around £20 from Speedy Cables' of London (01992 581 600]

Easy! It should only take a couple of hours if you've got access to a small lathe and all the parts to hand. It goes without saying that for safety's sake new pads and fluid should be used and everything that doesn't move Loc-tited. The end result works well, and looks pretty too! Andy.





