Fitting Landrover discovery wheel studs to my GT6

Having fitted minilight wheels to my GT6 about 10 years ago I seemed to be shearing the Triumph standard wheel studs on regular occasions without much effort. I ordered some Landrover Discovery wheel studs part number 158729M from a triumph supplier and also purchased some new wheel nuts and some locking wheel nuts from Midland wheels.

The thread size are M12 with 1.5mm pitch, you can see the difference between the Landrover Discovery studs and standard triumph wheel studs in picture 1. The spline on both are the same size and Triumph owners have been fitting these for quite a few years now as an upgrade.

The advantages are being a longer stud there is more thread inside the nut which relates to more full turns and being a bigger thread they are able to be torqued up to 60lbs as opposed to 35lbs of the standard triumph studs.

Changing the Front Wheel Studs

Due to the length of the Landrover Discovery stud the front rotor needs to be stripped right down which means removing brake disc from the rotor (picture 2). Some people might suggest cutting a few threads of the new stud so you haven't got to strip the disc from the rotor but this defeats the object.

Press the old studs out from the rotor using a hydraulic press or a bench vice using sockets. I had to remove a small amount of material and paint on each of the stud apertures with a dremel to allow the stud to sit square at 90degrees (pictures 3 before and 4 after), I also removed a small amount on the stud with a file in a vice the new studs can then be pressed into position.

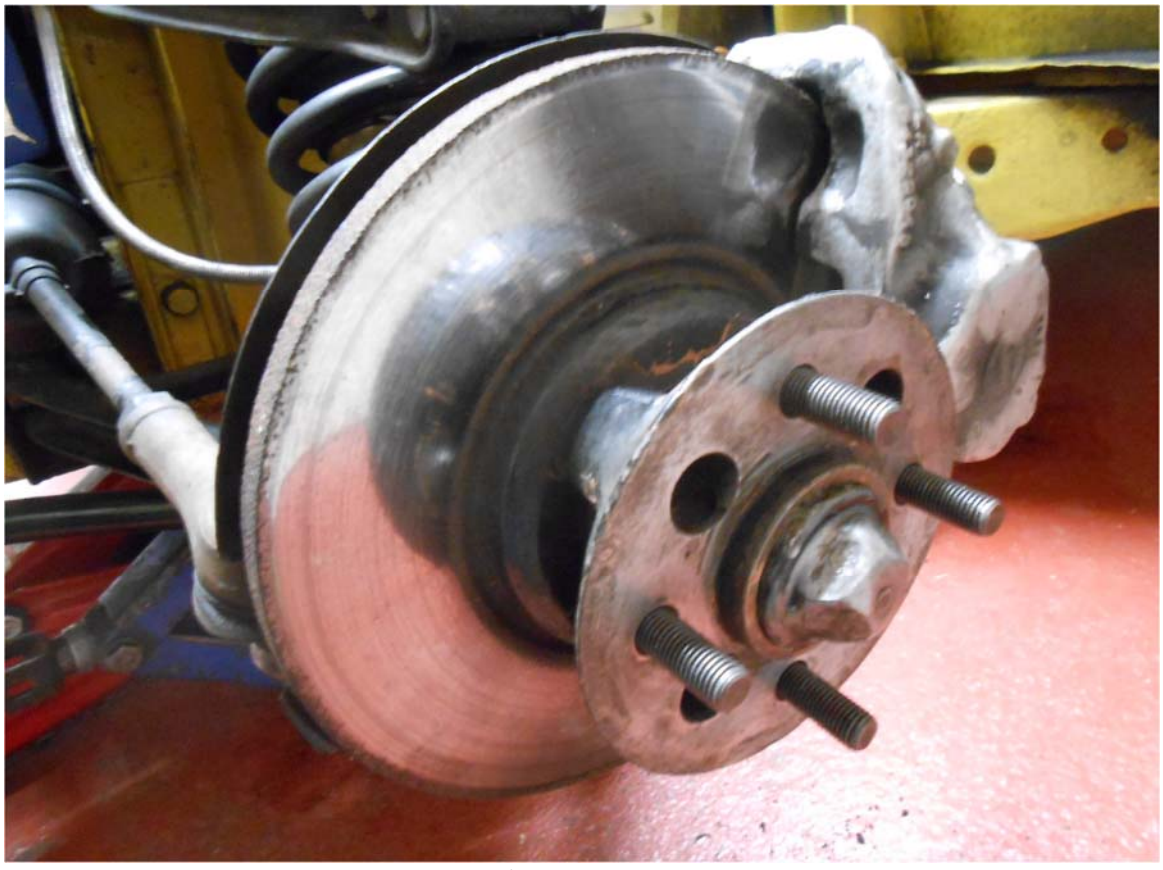
I then reassembled the brake disc to the rotor and refitted back on the car (picture 5), I then carried out the same procedure to the other side.

To carry out the work fitting the new Landrover Discovery Studs on both the front wheels took about a mornings work. With both wheels refitted they were torqued up to 60lbs.

Picture 2

Picture 3

Picture 4



Picture 5

Changing the Rear Wheel Studs

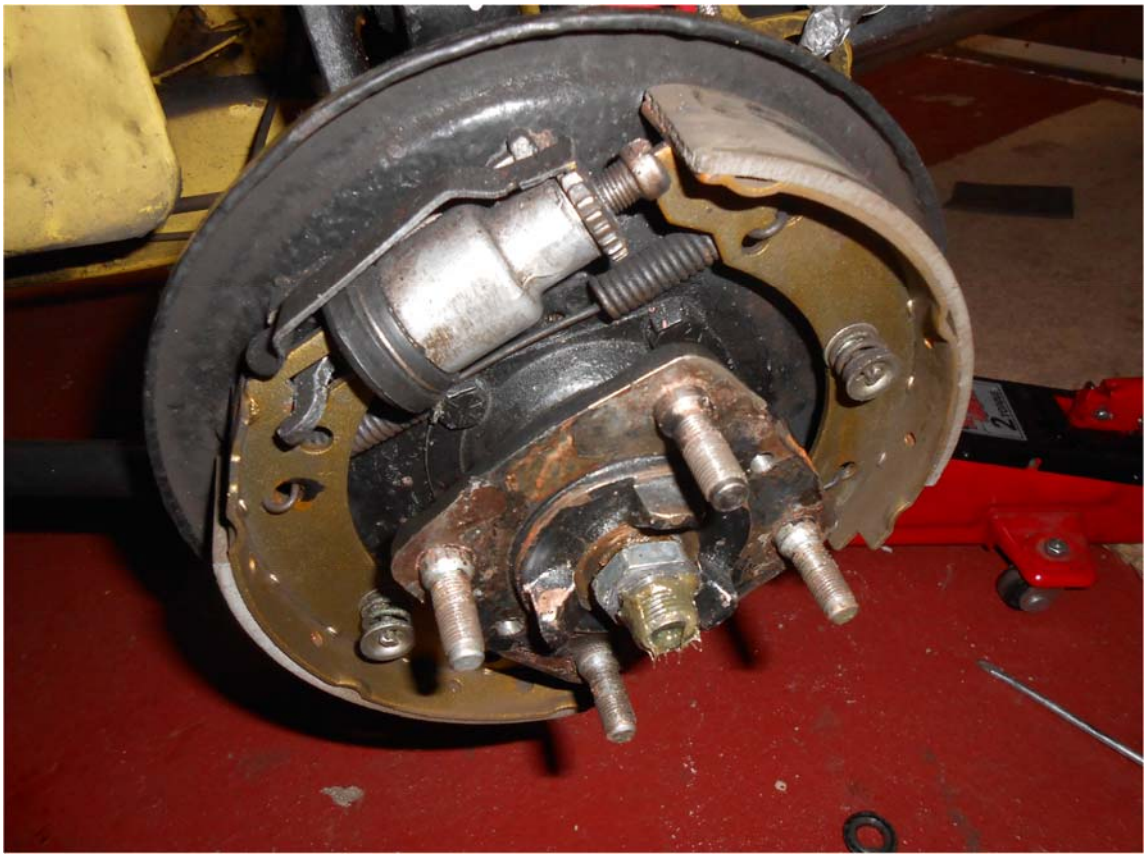
With the rear wheel removed and the Handbrake applied I removed the Drive Shaft Nylock Nut, I then unscrewed both of the brake drum holding screws and removed the brake drum. Again due to the Length of the Landrover Discovery Studs they are too long to replace the old studs due to them fouling on the brake drum fixed back plate, some Triumph owners have drilled a hole in the fixed brake backplate to allow them to be fitted without removing the hub and then fitting a rubber grommet in the backplate to prevent any ingress of water/dirt. Some people might again suggest cutting a few threads of the new stud but this again defeats the object of fitting the Landrover studs. With the Driveshaft nylock nut removed I then fitted a cut down old nut back onto the driveshaft thread to a position to allow the hub to be released of the driveshaft and stop the hub,puller and bracket from flying off across the garage floor hitting anything in its way **(**picture 6)

(I wouldn't advice or attempt to remove a hub without the cut down nut fitted to the shaft on the grounds of safety). I then fitted the Hub Puller which is the correct puller supplied by the TSSC shop, it is necessary to use this tool as other pullers probably and usually wont work and could end up damaging the driveshaft. I also made up a bracket to enable me to to remove the hub from the driveshaft while it is fitted to the car and this bracket stops the hub from turning when tightening the puller main bolt (picture 7).

I then tightened up the Hub Puller main bolt until the hub came free of the taper, I then removed the Hub puller and removed the cut down old nut and refitted the hub puller and bracket again and tightened up the Hub puller main bolt until the hub was free from the driveshaft. Picture 8 shows hub with standard studs and hub with Landrover Discovery studs fitted.

Press the old standard studs out from the hub using a hydraulic press or a bench vice using sockets the new Landrover Discovery studs can then be pressed into position. The Hub can then be refitted back on the driveshaft using a new nylock nut (picture 9) then refit the brake drum and road wheel and torque up the nuts to 60lbs. The same procedure can then be carried out on the other rear hub.

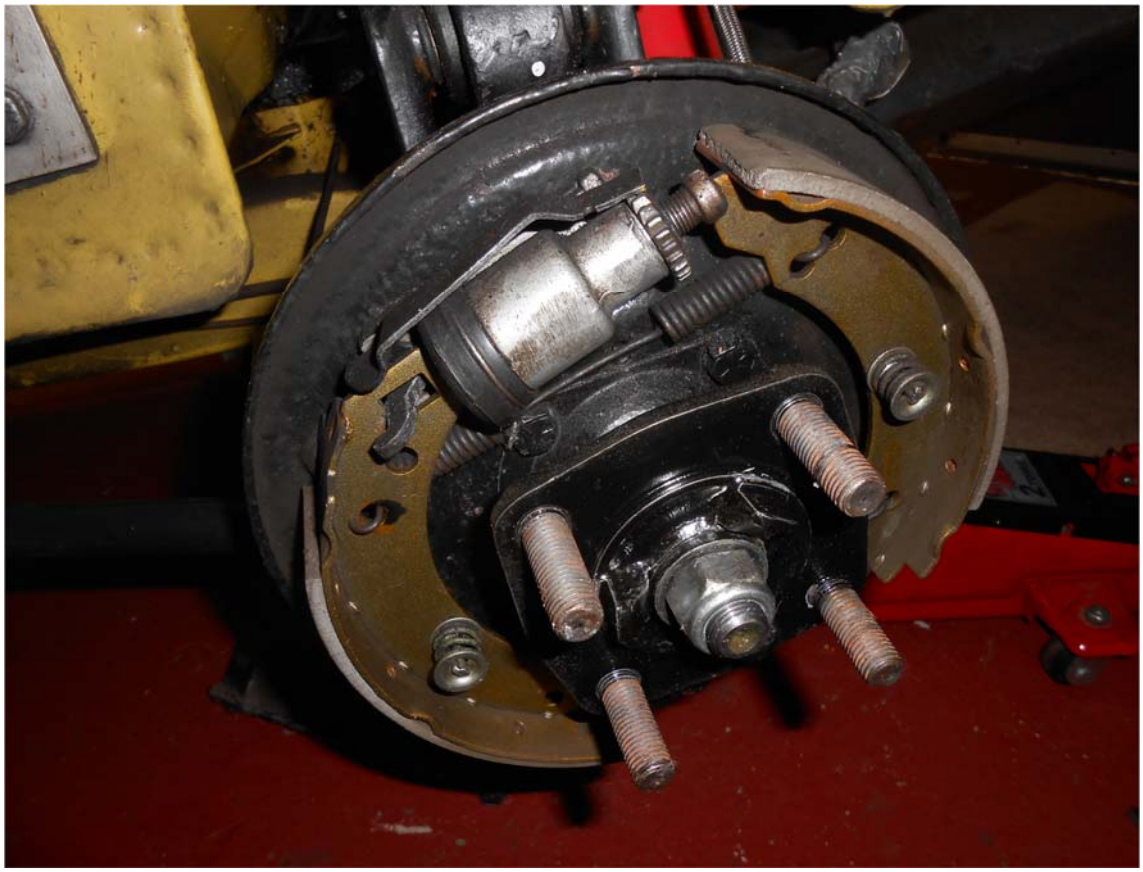
To carry out the replacement fitment of the studs took me an afternoons work.



Picture 6

Picture 7

Picture 8



Picture 9

After refitting the wheels and wheel nuts take the car for a run and afterwards recheck each wheel nut again with a torque wrench.

I carried out this work on my GT6 but it is the same procedure for Triumph small chassis cars ie:- Heralds,Vitesses,Spitfires,Bonds or Triumph based kit cars.
Just remember to make sure you have the right wheel brace in your boot in case you have a future puncture as my old wheel nuts needed a 17mm brace while my new wheel nuts need a 19mm brace.

Mikey J