

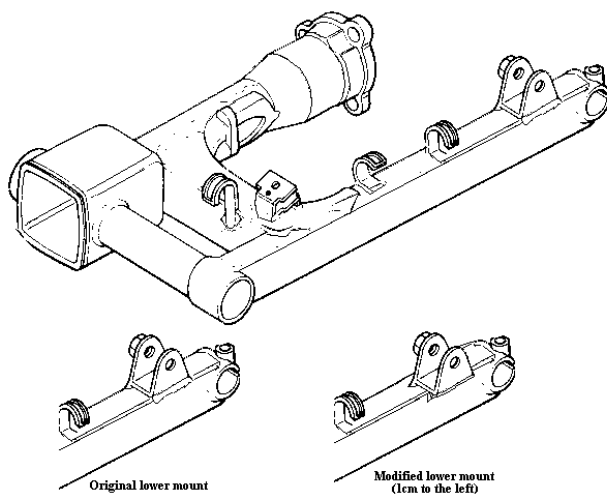
Fitment of a GL1100 swingarm + final drive in a GL1000.

It is possible to fit a GL1100 swingarm into the GL1000 frame. This way the bike gets a longer wheelbase of around 2.5". This way the stability of the bike increases. Because of the GL1100 final drive of 3.10/1 ratio instead of the GL1000 3.44/1 ratio the RPM at any given speed will decrease. This way your engine runs at lower speeds and the fuel consumption should decrease. But when overtaking you'll have to downshift more as before. With this conversion you also get the GL1100 brake caliper at the rear. If you use the 1982-'83 model you get a dual piston caliper with smaller pistons. You can also fit the unified braking system if you like.

For the wheels you can use the "comstar" or the "11 spoke cast wheel". The '82-'83 wheels are smaller in diameter as the GL1000 rear wheel. But this doesn't affect the seat height. The rotation radius is around 0.5" less as the 1000 tire I use.

The parts I used are:

- | | |
|-----------------------------------|---------------------------------------|
| GL1000 swingarm pivots | GL1000 pivot nut (in frame) |
| GL1000 rear master brake cylinder | GL1000 drive shaft |
| GL1100 drive shaft | GL1100 drive shaft joint |
| GL1100 swingarm | GL1100 final drive |
| GL1100 brake caliper | GL1100 shocks + air hoses & valve |
| GL1100 wheel & axle | Bolts, nuts to put all back together. |



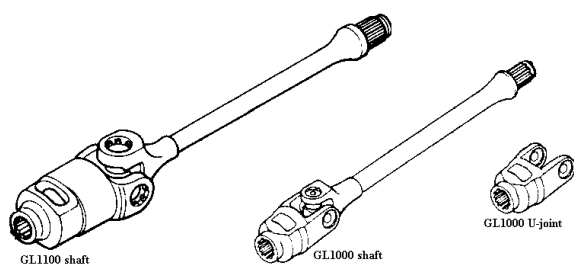
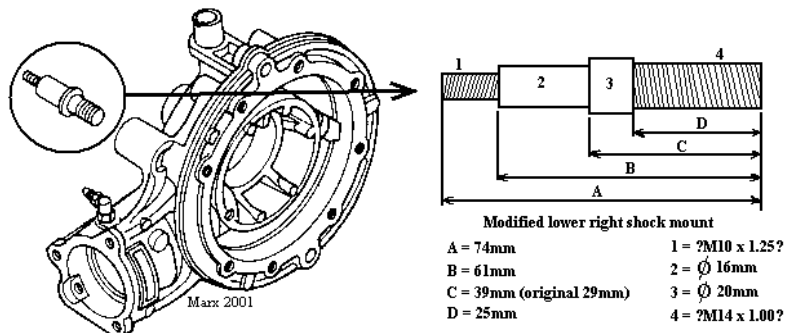
First thing you'll have to do is modify the lower fitment of the shocks on the swingarm and final drive. The shocks are about 0.8" further from each other as on a GL1100. These mounts must be relocated. At the left side you need to grind the "fork" from the swingarm with an angle grinder. (careful not to damage too much).

You need to re-weld the "fork" 0.4 inch further to the left (away from the centre-line of the swingarm). Best is to re-weld the fork using MIG. This modification is seen in picture 1.

Next thing you need to do is make a new right side lower shock mount on a lathe (or a machine shop). This one is also 0.4inch longer.

You can see the measurements in "picture 2".

The size of the thread is measured at the machine shop, don't know it. The measurements are METRIC in millimeters.



The biggest modification is to swap the small 1000 U-joint onto the 1100 shaft. I didn't do it myself, this was done by my local engine shop.

If you don't do this the shaft will be mis-aligned with the engine output shaft. This because the small U-joint of the 1100 is about 1" longer as the small 1000 U-joint.

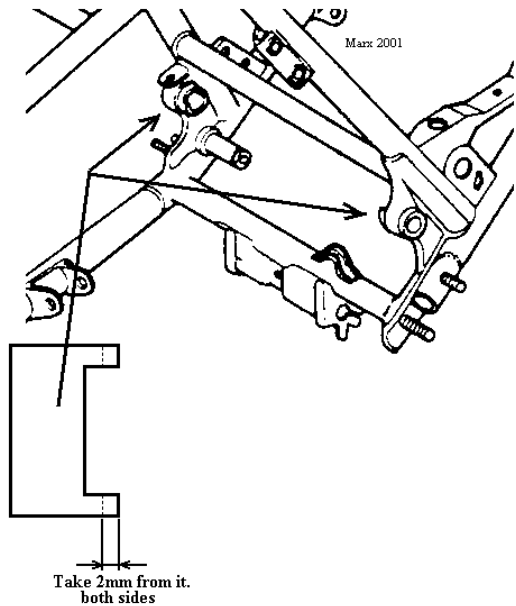
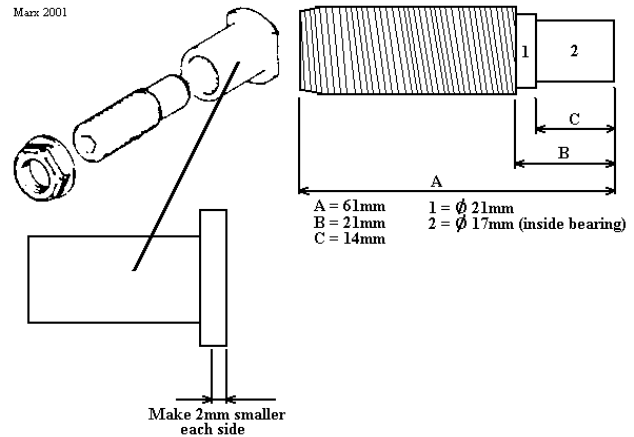
The modification is seen in "picture 3"

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Next thing to modify is the GL1000 pivot bolt and nut (thing in frame). The measurement of these bolts and nuts are pictured in "picture 4". You need to do this modification on both sides.

For the dustseal in the swingarm you need to buy 2 new ones, 21x40x5 or 20x40x5 (original was 26x40x5)

You can also MIG weld 1 pivot bolt "lock nut" to the pivot bolt. The taper bearings can be adjusted from 1 side like the GL1100 has it. Welding the nut is not a must, but you can do it after adjusting the bearings.



Next thing and last big modification you need to do is to grind something from the frame. You need to grind the extensions from the frame where the pivot nut is hold into place. You need to take 2mm from each side of the frame.

you can see the modification in "picture 5".

When you made all these modifications you can put the swingarm into the 1000 frame. Don't forget to install the drive shaft first before installing the swingarm in the frame. Ofcourse you put new bearings in the swingarm and the new dust seals. While you at it inspect the bearings in the 1100 wheel. I also overhauled the caliper by installing new seals in it to install stainless steel pistons. The machine shop made these for me for much less money as the OEM ones from Honda. When the swingarm is in the frame, put in the pivot bolts and torque them with 1100 spec. One side with 100Nm, other side with 18Nm. Install the 1100 shocks, find some space to route the airhoses and a place to fit the airvalve. Connect the 1100 caliper to the 1000 master cilinder and install the caliper, wheel and axle in the rear of the bike, fasten everything and check for loose connections/bolts/nuts.

I've even calculated the speed difference between the 1000 and 1100 final drive. That's about 7Mph (12Kmh) faster travelling at 3000RPM as before with the 1000 final drive.

When I finished this writing I didn't drive the bike to get an impression, but members on the mailing list will hear from me about the drivability and feul consumption. Next newsletter I'll try to write a complete manual on how to overhaul the GL1000 waterpump.

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