

Bevel Gear Shaft Repair

By Mr. Zooks @ [The GS Resources Forum](#)

Mr. Zooks was kind enough to snap some pictures and type up his procedure illustrating how he repaired a broken bolt holding the U-joint between the gearbox and axle. Thank you Mr. Zooks! -BassCliff

This is what the bevel gear from the back of the gearbox should look like.



Unfortunately this is all too common on these bikes. The nut comes off the thread and then the thread snaps off due to movement.



Not the best pic, but you can see above that I have had an engineer drill the shaft and tap a thread into it.



This is the shaft with the new bolt sitting in it. The bolt is an M12 x 40mm (long) allen head. It is high tensile.



This shows the half of the universal joint that the bolt is designed to hold in place.



This shows the assembly together. The washer on that bolt is also high tensile to help 'spread the weight' and hold everything nice and snug.



Another pic of the whole thing together. I used high strength 'loctite' to make sure it doesn't come apart again. Torque for the bolt is unknown so I just did it up 'really tight' (by hand) with an allen key.