



The idler gear has been replaced, with the shaft being given some "extra" hold-in-place security. In addition to the added small bolt and washer, the shaft was peened and secured with high-strength Loctite.



This similar repair to the idler gear shaft was done to a spare 4-speed I purchased a couple of years ago. While looking a bit rougher, I'm sure it did the job of securing the shaft.

support system! Robert Fleischer and his wife Penny were touring the Western US on a five week tour and had stopped by our home for a couple of days. Bob, or "Snowbum" as he is known in Airhead circles, is one of the main Airhead gurus in the Airheads Club and on the email discussion list. He and Penny mowed our badly overgrown lawn and helped us clean up the garden while staying with us. Bob also provided the additional "grunt" needed to remove and replace that flange nut. You then undo the seven (be sure to get 'em all!) 10mm nuts that secure the cover to the case. The cover is then heated to approximately 212 degrees F with a pair of propane torches. The kick start lever needs to be pushed about a quarter of its travel to allow the clearance of the internal parts as it is tapped free with a rubber mallet. There are edges and corners that can be struck with the mallet to lift the cover enough to free it of the case. It is

lifted off and set aside to cool.

The gears and bearings in this gearbox were in fine shape and needed no attention other than a good cleaning of the old oil in the case. While things cooled down, the old gasket material was scraped off. The shaft that the idler gear turns on was mounted in a drill press vise and drilled and then tapped for a 6mm short bolt. This will be used to secure a washer that will keep the shaft in place when it is replaced in the cover. The shaft was also peened with a punch to increase the tightness of the fit. As a final measure, permanent Loctite was applied when the shaft was replaced in the cover.

The bearing clusters were measured for height and the shims adjusted for proper endplay. A new seal was installed in the cover for the output shaft. A new gasket was placed on the case edges. The cover was reheated and replaced, being seated with a few taps from the rubber mallet.

The seven nuts were replaced and torqued to 8 ft lbs. Bob helped me retorque the output flange nut to 160 ft lbs, using the extensions on my large torque wrench. A quick check to make sure the gearbox shifted nicely through all four gears, and it was ready to return to the owner.

I've been doing this column for almost six years now. I sort of feel that I've covered just about all the problems and repairs that happen with our Airheads. With that in mind, I'm going to revisit some of the tasks I have discussed in years past. I'll shoot new photos and write new text, but the topics will be from years past. We have a lot of new BMW MOA members who have joined us in those six years. Others have acquired an Airhead to go with their newer BMW motorcycles. If something "new" comes my way that is a good subject for the column, I'll certainly cover that. I welcome suggestions as well!



LD COMFORT

*The answer to riding comfort.
Shorts, Tops and Tights.*

www.LDComfort.com

1.888.642.7091

Put an end to painful rides
with the only undergarment
made with a dual layer to
keep you drier.

PERFORMANCE
UNDERGARMENTS
MADE FOR LONG
DISTANCE RIDERS



Getting to the Bottom of Rider Comfort

RIDE CROATIA



Tours & Rentals, BMW motorcycles

www.adriaticmototours.com