

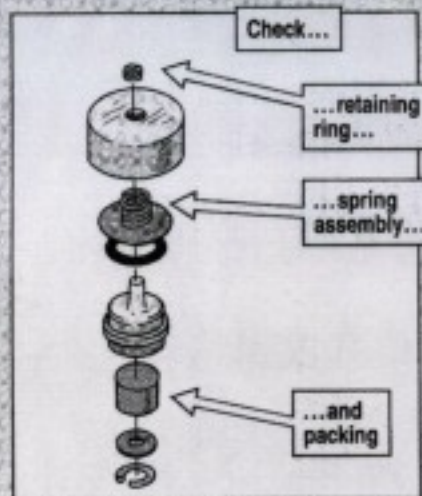
# Grinding the Gearbox

The chip detector tells you there's metal swimming in your Huey's tail rotor gearbox, but the oil sample says it's clean. There's a good chance you're seeing the birth of water-caused corrosion in your gearbox.

To stop the corrosion, stop water intrusion.

Some water gets in through the vented filler cap. When you're cleaning in the gearbox area, make sure no cleaning chemicals or water is sprayed or dripped on the cap.

It's important to keep the cap in top shape, too. It's one of your last lines of



defense in keeping water out of your gearbox. Check the retaining ring, the spring assembly, the chain and pin, the washer and the packing for wear.

To check the aluminum packing for wear, lay the filler cap upside down on

a workbench. Press on the washer that holds the packing in place and then release it. If the washer springs back against the retaining ring, the packing is OK. If it doesn't spring back, it's worn out.

Replace the packing with NSN 5350-00-286-4851. Use enough packing to put the washer under tension, then insert the retaining ring. Coat the packing with lubricating oil, NSN 9150-00-985-7099 or NSN 9150-01-209-2684.

Now take a close look at the gearbox case for cracks, corrosion or damage. Check where the sleeve assembly mates to the case. Look for gaps in the sealant around the studs. Check the predrilled holes in the sleeve assembly to make sure they're sealed right.

Most jobs around the tail rotor gearbox are done at AVIM level, but preventing water intrusion and corrosion is an AVUM job.

