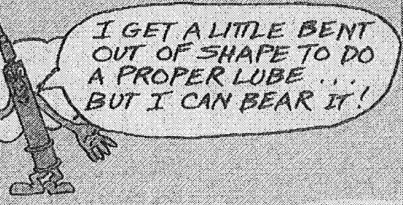
On Lubing Bearings



When it comes to lubing your Kiowa's tail rotor driveshaft bearings, too much lube too often is as bad as too little lube too late. Either one can result in excessive bearing burnout.

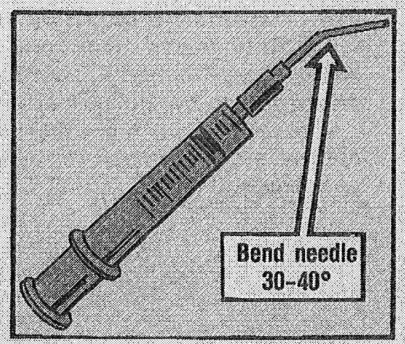
All eight bearings get ½ to 1cc of aircraft grease, MIL-G-81322, every 25 flight hours, like it says in Fig 1-5 of TM 55-1520-228-23-1. But that's easier said than done because:

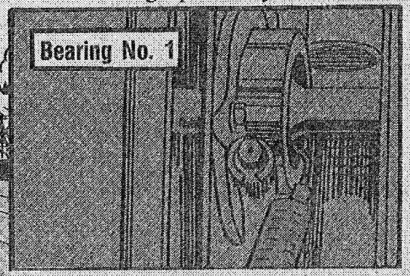
(1) The location of the No. 1 and No. 2 bearings makes them almost impossible to lube—unless you modify the needle, NSN 6515-00-754-2834, called for in the TM.

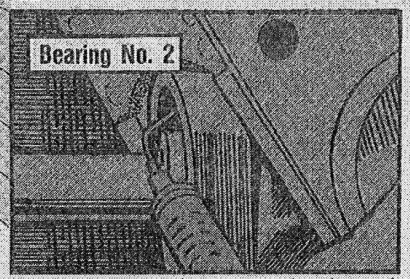
(2) Some of the older bearings have lube ports that require a special lube gun adapter.

Here are some tips to help you lube all eight bearings on time every time:

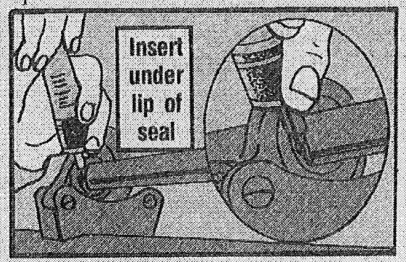
Bend the needle enough to let the point slip under the lip of the No.'s 1 and 2 bearing seals. Before bending, though, insert lockwire or one of the needles' cleaning rods into the needle nose to keep it from closing up when you bend it.







Insert the needle point under the seal lip with the beveled side of the needle nose toward the center of the bearing. Otherwise, you can cut the seal when you slip the needle under the lip.



Then slowly push the needle point away from you until it slides into a socket under the seal. If you can't find a port, pull the needle until you find a port. Each bearing has two grease sockets, 180 degrees apart.

If your bird's bearings have exterior grease ports, you need a needle-nose adapter, NSN 4930-00-200-1841, for your lube gun. But take care not to pump more than 1cc of grease into each bearing. If you do, you'll stretch the seal and maybe even unseat it. When that happens, you have to replace the bearing.

So practice pumping grease from your lube gun 'til you have a good idea how much of a stroke you need to pump ½ to 1cc. Then use that stroke when lubing bearings.