



## **Removing Torque Link Bushings (Nose Gear Scissors)**

*By Dave McFarlane*

Removing the flanged bushings from the torque link forging can be difficult as there is not a good surface to press against or grab onto. An easy way to remove them is to thread them with a tap, screw a bolt in the thread you made, and then drive or press against the bolt. The thread does not have to be a full depth thread for the bolt to hold securely in the bushing. The bushing material is somewhat hard, but not so hard that a standard hardware store tap will not do the job. Use cutting oil on the tap to prevent tap damage. Normally the bushing will then come out easily.

For stubborn bushings, soak the link assembly in boiling water before pressing the bushing. The heat will expand the aluminum forging more than the steel bushing. This helps loosen the press fit while limiting the temperature to prevent from overheating and harming the heat treat of the aluminum forging. A controlled oven can be substituted for boiling water as a heat source, but do not exceed 350° F. Do not use flame or other non-controlled heat sources.

An alternate method is to put dry ice in the bushing before driving or pressing on the bolt you threaded into the bushing. Do not over-press or hammer as the aluminum can gall to the bushing and leave a damaged bushing bore. If the bushing does not come out with light to moderate force take the time to use some heat or cold to help.