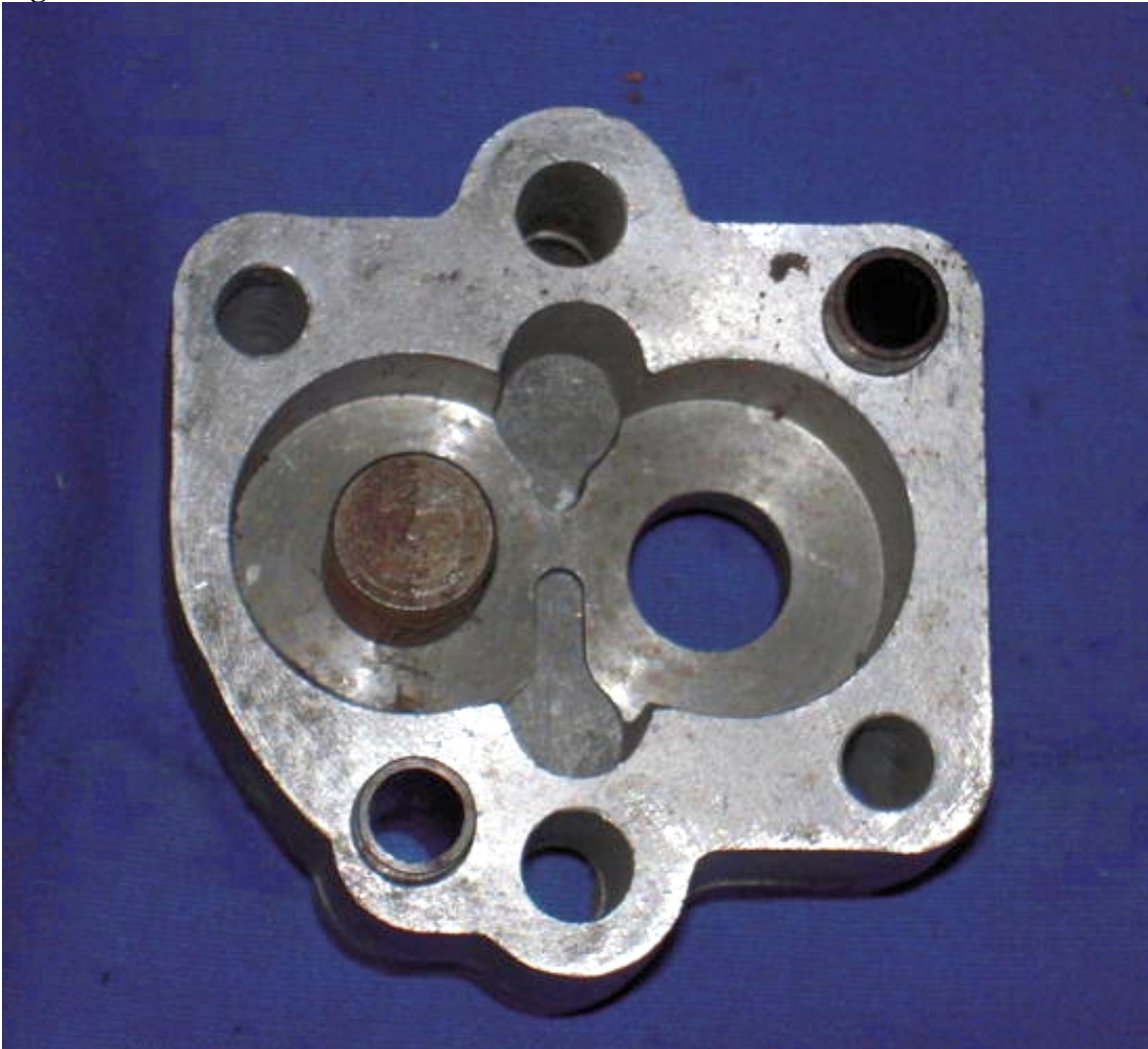


**Tech Tip: Lapping the Oil Pump Body and Cover Flat**  
**By Terry Duffy**

In the Figure 1 you see a NOS OIL Pump Body and in the Figure 2 a NOS Cover. These pictures give owner an idea of how the new part's finish looked from the factory. Remember these parts are 50 plus years young and do have a few shelf marks. But in both the Cover and to some extent the Pump Body you can see fine machining lines of Factory Parts.

**Figure 1**



**Figure 2**



### **Lapping Pump Cover and Body:**

To start with you will need:

- a piece of Glass 12" X 12"
- a sheet of 220 Grit Aluminum Oxide Sand paper
- the Oil Pump Body and Cover.

Why a piece of Glass? Because it is a very flat surface and cheap! See Figure 3.

**Figure 3**



Your parts Must be clean and oil free, lay the paper on the glass to keep it flat, your pump will have (2) hollow steel tubes in it. These are to locate the pump in the cam cover; they must be removed before lapping the Pump Body.

See Figure 4 & 5. Next with light finger pressure to the Pump Body, move it in a circular motion working up and down the sheet and moving left to right, until all marks and nicks have been removed. Remember the idea here is to not stay in one spot, because you will load the paper with aluminum grit. Blow the dust off once in awhile.

**Figure 4**



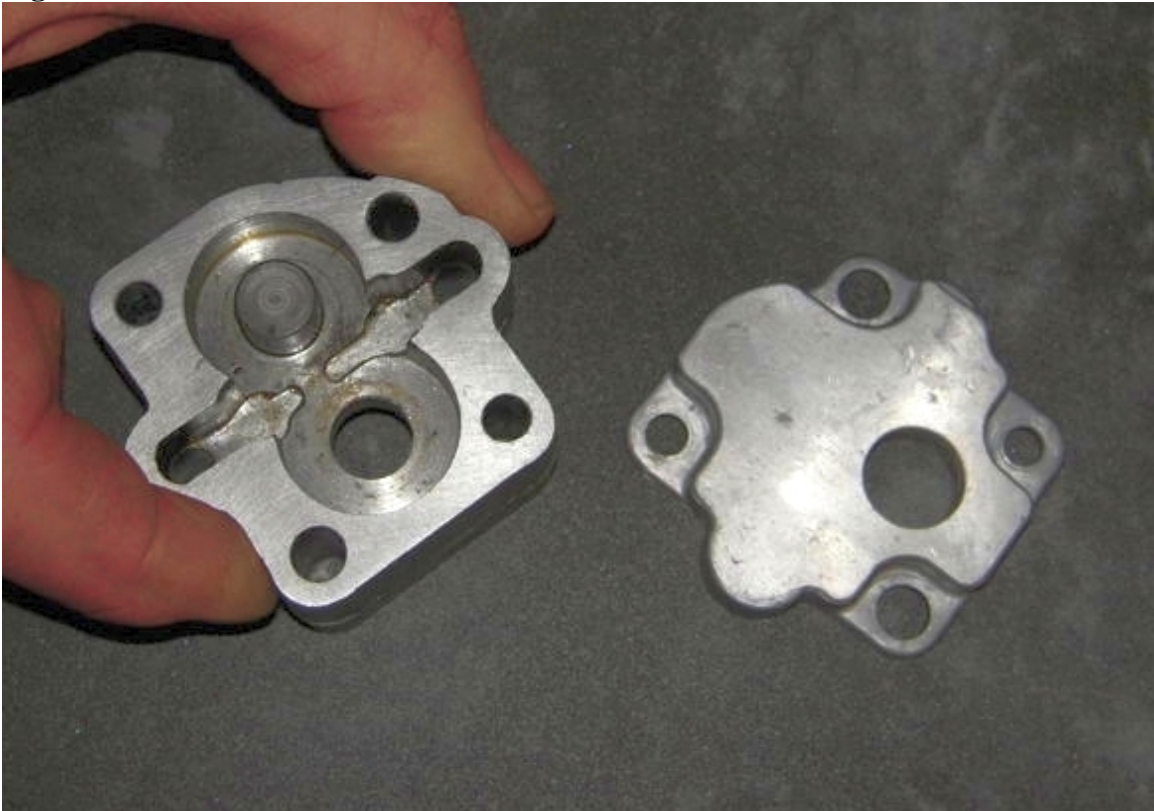
**Figure 5**



### **Final Step in Lapping:**

You will need again the piece of Glass and 1 sheet of 500 grit Wet or Dry Sandpaper plus your Pump Body and Cover. Figure 6 shows the same set-up with the parts to be lapped and again in a Circular Motion you will repeat the same steps on both sides of the Pump Body and Cover, until the finish has a fine dull look with all scoring and nicks removed as in Figure 7.

**Figure 6**



In this final picture you can see the surface finish, your pump, after a cleaning to remove any left over grit may be assembled back into the Cam Case Cover. You gain a better sealed gasket surface with no more than an hour of time from removal to re-assembly.

**Figure 7**

