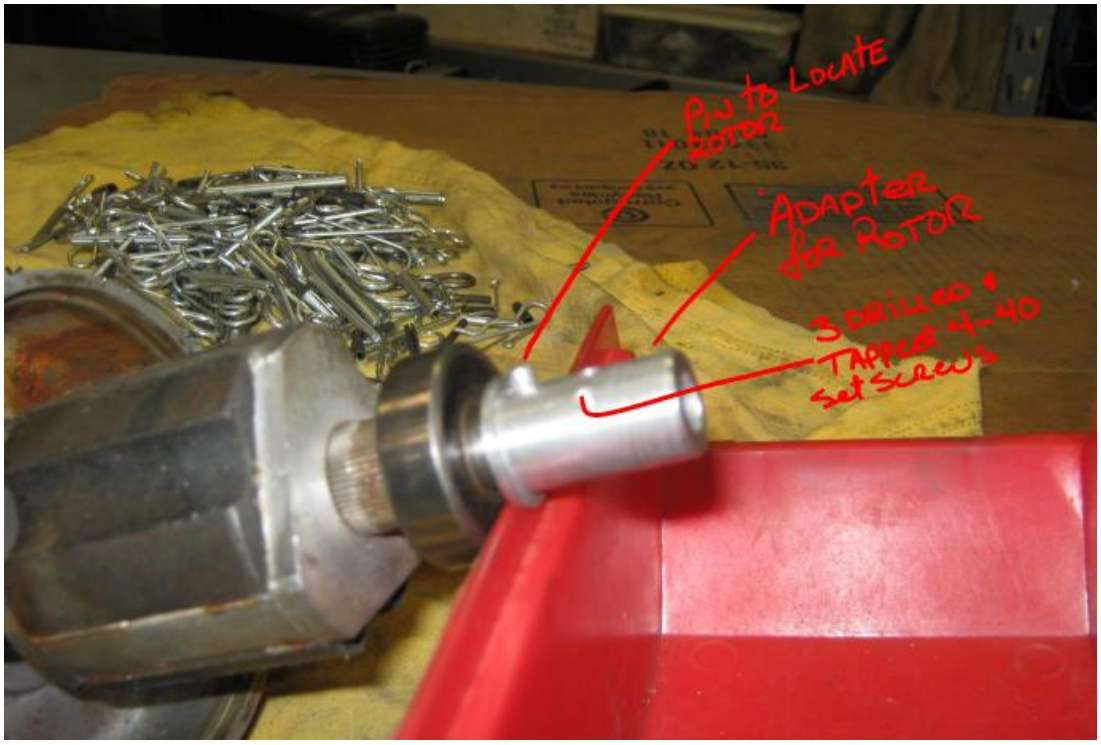
Dynatek DS2-1 Conversion to Bridgestone Alternator/Points Housing

1. I machined an aluminum adapter which was a press fit onto the Bridgestone alternator shaft. The adapter has 3 drilled #4-40 set screws and a rotor locating pin. The locating pin is a press fit into adapter. I locate the rotor onto the shaft and lock it in place in the key way with one of the 4-40 set screws. I drilled and tapped 3 of them offset by about 30 degrees in case I wanted to change the orientation of the rotor geometry. The adapter is stepped at the back (closest to the bearing) to shoulder the rotor and keep it in place.



2. The rotor is a snug fit (light hand press) onto the adaptor. It is held in place by a stepped washer and a 4mm by .7 SHCS.

3. I used a jeweler's saw and cut the Dynatek plate to match the size of the Bridgestone points plate. The Dynatek plate has to be slotted allow rotation and for the 2 adjusting screws which lock the Dynatek plate to the housing to clear the pickups. 2 half moon slots had to cut in the Dynatek plate to clear the housing cap threaded casting protrusions. The Dynatek plate is locked onto the Bridgestone points plate using 2 - #6-32 shcs (I have more US than Metric screws so I used them – any screw like a 4mm would work). My thoughts are as follows. Set the Dynatek pickups to be

exactly 180' opposite each other. Once that is done then when you set the actual timing, the Bridgestone points plate can be rotated to the correct position and both points are set. I found that the centerline of the Rotor magnet was about .375" above housing base, so I raised the Bridgestone points plate and Dynatek plate using an .125" spacer plate. I routed the wires thru the capacitor openings and took the wires out thru the stock opening on the side of the housing. One final note, I had to file down the 2 raised casing lines on the Bridgestone housing which allow a screwdriver to be inserted and rotate the points plate because it interferes with plates when raised .375"