

AO-42 MAGNETO SERVICE

By Chuck Watford

IMPORTANT NOTE: Before you do all this, if your magneto won't fire and your mule has an electric hour meter, unplug the hour meter and try it again. If the hour meter shorts internally, it will ground the magneto. I've seen this twice!

Occasionally, especially after a mule has not been started for a while, the magneto will not fire. Most of the time, a simple cleanup will solve the problem.



Start by removing the magneto from the engine.

Mount the magneto in a secure manner and remove the 4 screws holding the top cover.

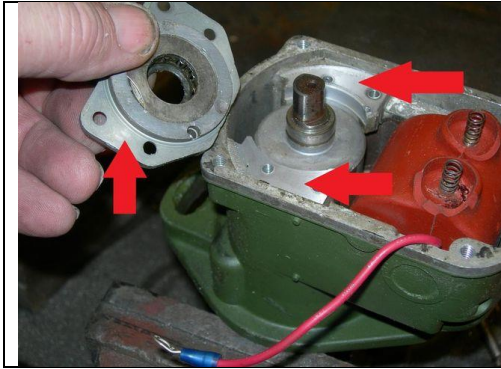


Remove the top cover.

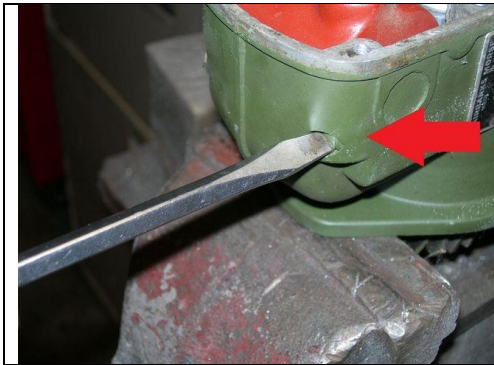
Remove the 2 screws holding the points in and remove the points.



Now remove the 4 screws that hold the top plate to the magneto housing.



The arrows show the places that need to be cleaned and polished.



Remove the two coil retaining screws. You will have to use a little heat from a torch to get the Loctite to turn loose. Hold pressure on the screwdriver and add a little heat to the area shown by the arrow, and as soon as the screw starts to turn, remove the heat.



Remove the coil from the housing.



All the contact points inside the housing should be cleaned and polished. I use a wire brush in a Dremel tool, followed by a light scuffing with sand paper.



Clean magneto housing top plate.



Clean coil mount.

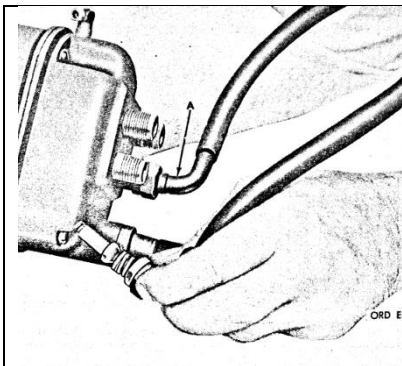


Don't forget to clean the contact points on the coil and the two coil retaining screws.



Reassemble the magneto, using a small amount of Loctite on the coil screws. Be sure to clean and polish the bottom of the point plate, even if you are installing new points.

Polish the points and set the gap to .015".



I use a spare plug wire to check for a spark, turning the magneto gear by hand. (AO-53 mag shown)



Install the magneto onto the engine. I like to retard the magneto by installing it one tooth to the left. Most engines seem run much better when they are timed this way, however, there are a few that don't like it at all, so you'll have to try it and see!