

The Villages Aviation Club

Safety Brief

June 2020



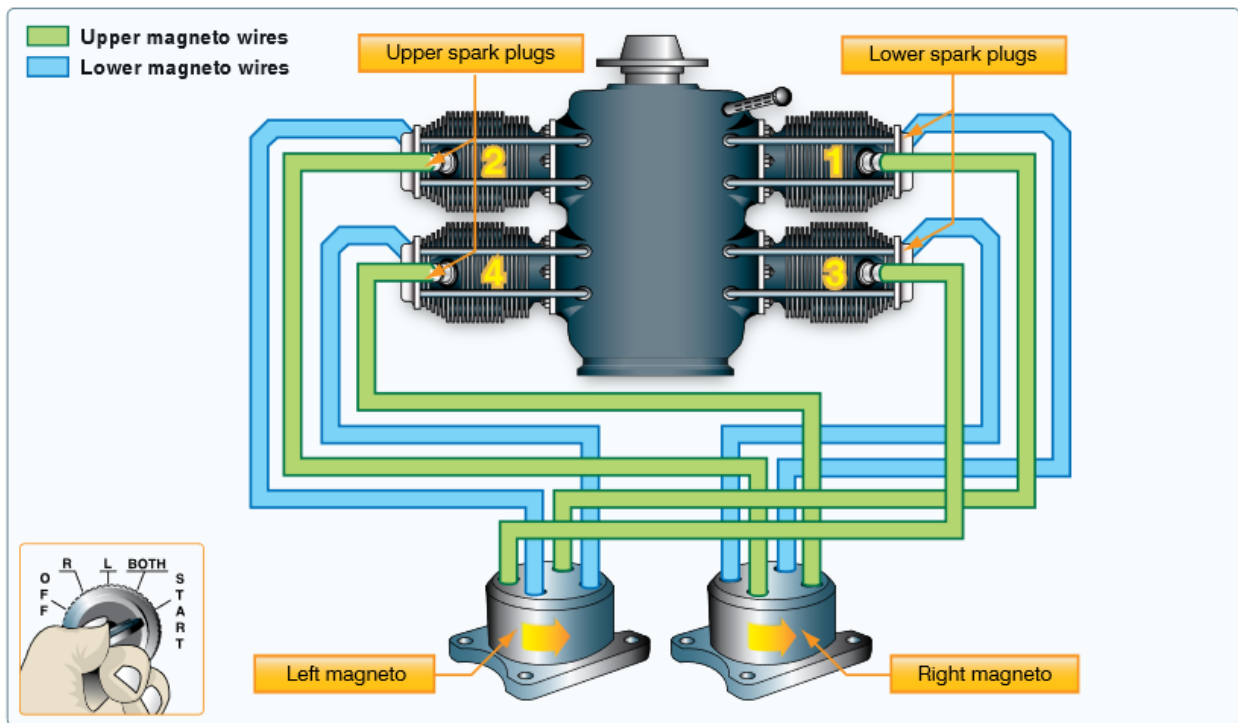
Hope all are doing well and staying healthy. June ends our meetings for the summer break, but not our goal of 100 percent safe flying. If you are still mostly house bound, don't forget WWW.FAASAFETY.GOV, where you can find free online courses and webinars.

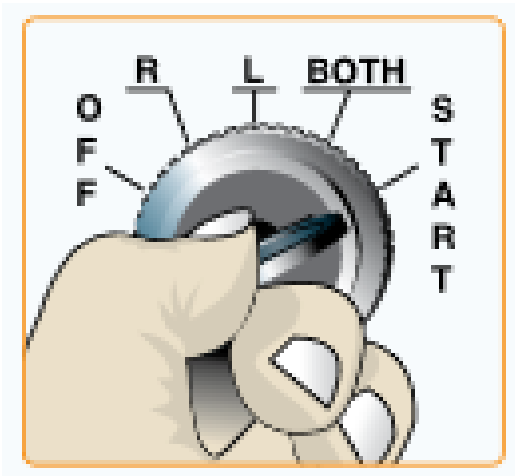
This month I'd like to talk about Magnetos. Some DPEs have stated that during a certification check ride, students do not show a full understanding of how magnetos work, and the best way to check them before takeoff. Have you ever taken off on one magneto? Here is the preferred way to check the magnetos per the Pilot Handbook of Aeronautical Knowledge (free on line). The POH should tell you the correct way for your aircraft. If not, follow these guidelines.

When checking the magnetos, we are checking three things. One, that the magneto grounding wires are connected. Two, that the

remaining magneto has enough spark to keep the engine running and three that the magneto drop is within limits.

A malfunctioning ignition system can be identified during the pretakeoff check by observing the decrease in rpm that occurs when the ignition switch is first moved from BOTH to RIGHT and then from BOTH to LEFT. A small decrease in engine rpm is normal during this check. The permissible decrease is listed in the AFM or POH. If the engine stops running when switched to one magneto or if the rpm drop exceeds the allowable limit, do not fly the aircraft until the problem is corrected.





Note: Magneto positions:
OFF/RIGHT/LEFT/BOTH

Engine running on 'BOTH'

Two clicks to 'R', check operation

Two clicks back to 'BOTH'

One click to 'L' check operation

One click to 'BOTH' check operation

Hopefully, you will be running on both magnetos when you takeoff. If you notice a decrease in takeoff performance, abort, and check out why.

Don't forget the ignition wire ground check at shutdown. With engine at idle, **briefly** turn magnetos to 'OFF', **then back on**. The engine should 'die' showing that the grounding wire is connected. Then shut down the engine per the POH.

Have a happy and healthy summer. Fly Safe.

Rich, The Villages Aviation Safety Officer