CAE Oxford
Aviation Academy Phoenix

Attention CAE OAA Phoenix Flight Crews,

In an effort to help mitigate some no fault found squawks, crews flying aircraft with Lycoming IO-360-M1A engines (currently DA40 and DA42 aircraft), please read carefully the following excerpts from the Diamond Airplane Flight Manuals and Lycoming Maintenance Manual with regards to flooded engine starts and excessive RPM drops during the runup magneto check.

Flooded Engine Start

The following procedure should be used if the engine is suspected to be flooded or "overprimed":

(c) Engine Will Not Start After Injection ("Flooded Engine")

1. Strobe light (ACL) ..... ON
2. Electrical fuel pump ..... OFF
3. Mixture control lever ..... LEAN, fully aft
4. Throttle ..... at mid position

WARNING

Before starting the engine the pilot must ensure that the propeller area is free and no persons can be endangered.

CAUTION

Do not overheat the starter motor. Do not operate the starter motor for more than 10 seconds. After operating the starter motor, let it cool off for 20 seconds. After 6 attempts to start the engine, let the starter cool off for half an hour.

5. Ignition switch ..... START
6. Throttle ..... pull back towards IDLE when engine fires

Magneto Check

The following procedure should be used if the RPM drop exceeds 175 RPM:

NOTE

If the RPM drop exceeds 175 RPM, slowly lean the mixture until the RPM peaks. Then retard the throttle to the specified runup RPM for the magneto check and repeat the check. If the drop-off does not exceed 175 RPM, the difference between magneto does not exceed 50 RPM, and the engine is running smoothly, then the ignition system is operating properly. Return the mixture to full rich.