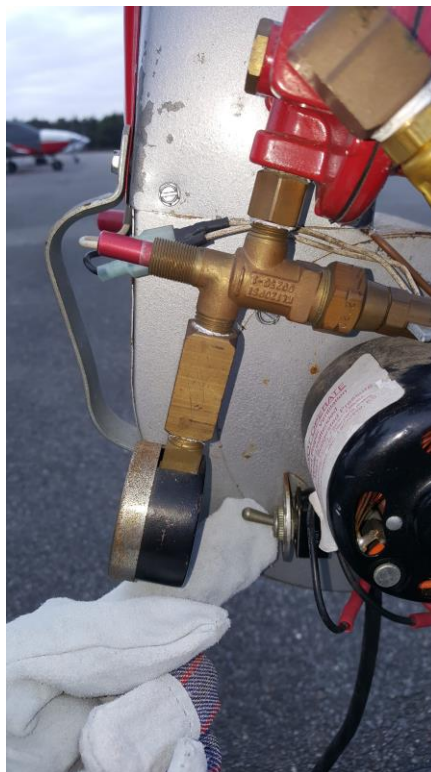


# Red Dragon Pre-Heater Instructions

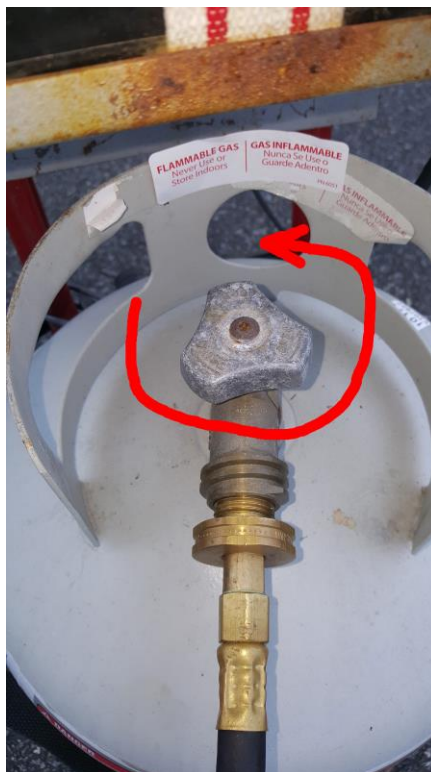
1. Load luggage, cargo, etc into the plane so that you will be able to start the engine as soon as possible after pre-heating. **ALSO, TAKE AND PROPERLY DISCARD ALL REQUIRED FUEL SUMP SAMPLES BEFORE STARTING THE RED DRAGON.**
2. Extract the Red Dragon from the JAC Shed (combo: 1938) and wheel it to the aircraft.
3. On Piper Aircraft, insert the air duct into one side of the cowl opening. Leave the plane's cowl plug in the other opening (on the Mooney, open the cowl flaps and insert the duct into one of them):



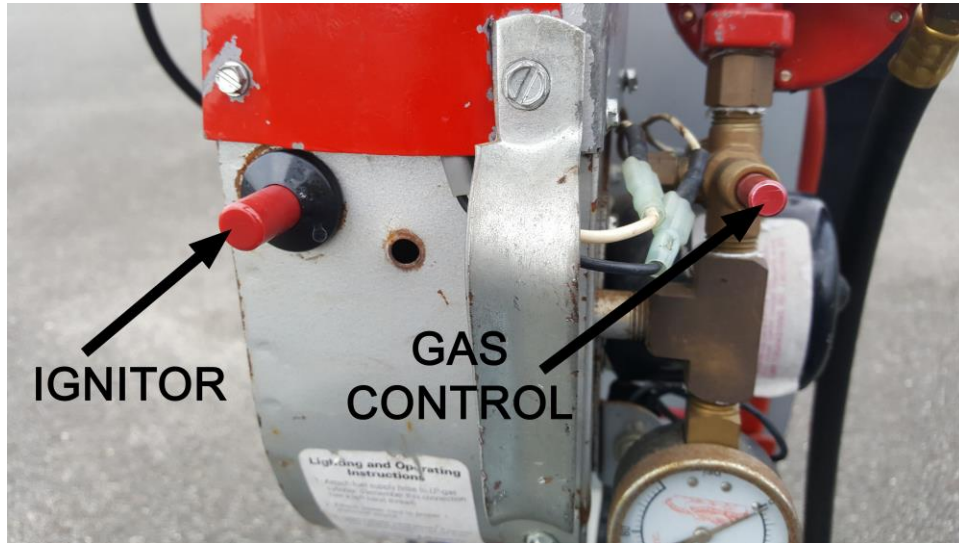
4. Turn on the electric switch below the gas pressure gage. This will start the blower motor.  
**DO NOT PROCEED IF THE BLOWER DOES NOT RUN.**



5. Open the propane tank's valve by turning it fully counter-clockwise:



6. Hold in the gas control button (right-side button) with one hand to start the flow of propane. Then, repeatedly press the ignitor button (left-side button) until ignition:



After light-off, proceed to Step 7 while continuing to hold the Gas Control valve. If ignition does not occur, try the following alternate techniques:

- A. Temporarily turn off the blower and again attempt ignition using the Gas Control and Ignitor buttons. If ignition occurs, IMMEDIATELY turn the blower back on. Proceed to Step 7 while continuing to hold the Gas Control valve.
- B. Temporarily turn off the blower. Insert the butane lighter into the access hole as shown below. Press and hold the Gas Control valve. Ignite the butane lighter. If ignition occurs, IMMEDIATELY turn the blower back on. Proceed to Step 7 while continuing to hold the Gas Control valve.



7. Continue to hold in the Gas Control button while the unit heats up. After about 30 seconds, the flame should remain on when the button is released. If it goes out, re-ignite and hold the Gas Control button for a little longer.

**DO NOT ADJUST THE GAS REGULATOR. IT IS PRE-SET - LEAVE IT ALONE. IF YOU SET THE FLAME TOO HIGH IT WILL MELT THE HEATING DUCT.**

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8. Let the heater run for 8 to 10 minutes (depending on outside temperature) and then move the heater duct to the other cowl opening (or cowl flap on Mooney) and put the cowl plug in the first side. Continue running the heater for another 8 to 10 minutes. Finish your pre-flight procedure while the engine is heating.

**DO NOT LET THE HEATER RUN UNATTENDED!!! CHECK THE TOP OF THE COWL FREQUENTLY. YOU SHOULD BE ABLE TO HOLD YOUR BARE HAND ON THE WARMEST PART OF THE COWL FOR AT LEAST 5 SECONDS. IF IT GETS ANY HOTTER, THE FIBERGLASS OR PAINT COULD BE DAMAGED!!!**

9. When pre-heating is complete, close the propane tank's valve by turning it fully clockwise. Ensure that the flame goes out. Remove the heater duct from the cowl opening and stow the cowl plugs. Allow the fan to continue running for several minutes as the unit cools down.



10. Turn off the fan and return the Red Dragon to the JAC Shed.

11. Load your passengers, board the plane, and start the engine as soon as possible.