Electronic Ignition Commander



Hand Propping Notes and Wiring Schematic

Version: 1.0

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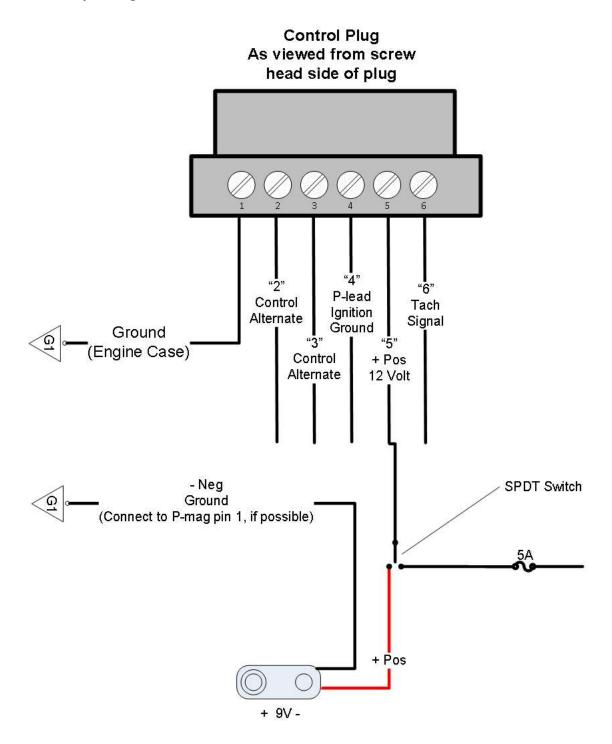
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9-Volt Battery Wiring Schematic



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Operational and Installation Notes:

- 1. Do not attempted to hand prop an airplane unless you have received training and understand how to do so safely, with someone else at the controls.
- The steps outlined within this document are to be used in the event of an emergency and are not designed for "normal" operations.
 It is up to the Pilot in Command (PIC) to determine the airworthiness of the aircraft.
- 3. Do not store / leave a 9-volt battery in the battery holder.
 - Batteries can leak and corrode the battery terminals and render it useless when most needed. It is best to store your emergency 9-volt battery where it can be inspected and replaced, if needed, every few months.
 - Do not store the 9-volt battery (ies) in such a way that will allow the contacts to short together.
 - If a 9-volt battery is in the battery box/holder, the ignition could be "hot", if the igntion is ungrounded.
- 4. The switch in the above wiring diagram is designed to isolate the aircraft's electrical system from draining the 9-volt battery in any phase of operation.
- 5. 9-volt battery boxes can be found on the internet by searching for "9 volt battery box guitar". Products similar to these should be displayed.



6. After installing the 9-volt battery box of your choice, label the box so it is clear which of the two igntion the battery box is connected to (left or right).

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Hand Propping With a 9-Volt battery

WARNING

Do not attempted to hand prop an airplane unless you have received training and understand how to do so safely.

Only attempt to hand prop and airplane when a qualified person is at the controls. Hand propping an airplane can cause injury or death.

The following is intended as a guideline only and it is up to the operator to understand how to safely hand prop their airplane.

- 1. Verify the aircraft's Master is off.
- 2. Verify both of the aircraft's ignitions are grounded (off)
- 3. Prepare the engine for starting by priming, if needed, and moving the propeller in the correct position for hand propping.
- 4. Insert the battery in the battery box.
- 5. Flip the switch to energize the P-mag from the 9-volt battery
- 6. Unground (make hot) the appropriate P-mag igntion as labeled during installation.
- 7. Hand prop the airplane
- 8. After starting, the 9-volt battery can be used to power the single P-mag until the RPM's are raised to the point where the ignitions are self-powering.
 - It is up to the aircraft operator to determine and know the RPM threshold for self-powering.
- 9. Once the RPM's are above the P-mag's self-powering threshold, turn the 9-volt battery switch to ship's power, unground the second ignition, and perform the necessary checks to prepare the aircraft for flight.

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