# **PCU5000X Specification Sheet**

| Customer Name          |  | Day Phone   |  | E-Mail      |  | OFFICE<br>USE |
|------------------------|--|---|--|-------------|--|---------------|
|                        |  |   |  |             |  |               |
|                        |  | Governor Drive Ratio<br>(from Engine Manual)        | 866:1 L                                      | .YC Rear Mt | 895:1 LYC Front Mt/ 540<br>Narrow Deck |               |
| Kit<br>Manufacturer    |  | OTHER, SPECIFY:                                     | 947:1 LYC 540<br>Wide Deck                   |             | 1:1 CONTINENTAL                        |               |
|                        |  | Governor Drive Rotation<br>(facing gov. base)       | Clockwise Counterclockwise                   |             |  |               |
| Kit Model              |  | Control Lever Angle (See<br>Note 1 Below)           | 0º to 359º<br>(Specify)                      |             |  |               |
| Engine<br>Manufacturer |  | Control Lever Rotation (See<br>Note 2 Below)        | Clockwise (AL) Counter-Clockwise (A)         |             |  |               |
| Engine<br>Model        |  | Oil Pressure to<br>Increase Pitch<br>(Decrease RPM) | Yes (P-520)<br>For Non-Counterweighted Props |             |  |               |
| Prop<br>Manufacturer   |  | Oil Pressure to<br>Decrease Pitch<br>(Increase RPM) | Yes (P-540)<br>For Counterweighted Props     |             |  |               |
| Prop Model             |  | Take-Off RPM<br>(Specify)                           |  |             |  |               |



 Note 1: Operating lever as shown, is set at 290° for counter-clockwise rotation. Dimensions shown are Metric and [U.S. Standard].
 Note 2: All PCU5000 control arms are spring loaded to hold against the High RPM adjustable stop screw. Control Lever Rotation is measured from High RPM to Low RPM when facing the head.
 Note 3: PLEASE SEE PAGE 2 FOR FURTHER GUIDANCE.

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### **PCU5000X SPEC SHEET FAQ's**

#### How do I know what the governor drive Ratio is?

All engine owner's manuals SHOULD have this information. It's always best to check with the engine manufacturer to confirm, if you're not sure. Here are some guidelines to follow, but these are not ALWAYS the case:

Lycoming with a rear mount (facing pilot) governor pad: **.866:1**\* Narrow-Deck Lycoming's with a front or side mounted governor pad (typically older Lycoming's): **.895:1**\* Wide Deck Lycoming's with a front or side mounted governor pad (typically newer Lycoming's): **.947:1**\* Continental's: **1:1**\* (Exception: Titan engines typically mirror a Lycoming, so check with Titan!)

## \*Again, it is best to verify with engine manufacturer if you can't find it in the engine owner's manual, because the guidelines above are not always true.

### Control Lever Rotation. Do I need Clockwise or Counter-Clockwise?

Depends on where your control cable attaches to the lever. The lever rests against the high RPM/low pitch stop, therefore when trying to determine this, imagine how the lever would rotate as your pull the prop control out, toward a lower RPM. Whatever the answer is (clockwise or counter-clockwise) is what you would put on the form.

### How do I know where the control lever needs to be positioned?

Kind of like the rotation, this depends on how it is mounted on the engine. Again, the governor control arm is spring held to the high RPM /low pitch stop. You must visualize where the cable will attach, when the prop control is pushed all the way in. The important thing to remember, is that the relief valve (the portion of the governor base that bows out), is always your 270-degree reference. Here is a diagram for clarification:



In this example, the lever is set to the 290 degree position. Good news is, that if you get this wrong, you can always adjust it in the field. Instructions on how to do so come with each governor.

"Oil Pressure to Increase Pitch (Decrease RPM)," "Yes for Non-Counterweighted prop." What does this mean?

A non-counterweighted prop is a standard, non-aerobatic, non-feathering propeller that uses oil pressure to INCREASE the blade pitch angle (move to coarse pitch). Unless you specifically ordered an aerobatic propeller, you probably have this.

### "Oil Pressure to Decrease Pitch (Increase RPM)", "Yes for Counterweighted prop." What does this mean?

A counterweighted prop is one that uses oil pressure to DECREASE the blade pitch angle (move to fine pitch). This is typically found on aerobatic propellers or feathering propellers. If you have an aerobatic propeller with counterweights, you should select this option. NOTE: PCU5000X is not available for feathering propellers.